RÜTGERS
Organics

RÜTGERS Organics Corporation

November 6, 2002

VIA CERTIFIED MAIL

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Re: October 2002 Monthly Report
RI/FS & Removal Action
RÜTGERS Organics Corporation
Salem, Ohio Site

In accordance with Paragraph X E of the Administrative Order by Consent regarding a Remedial Investigation/Feasibility Study (RI/FS) of the Nease Chemical Site in Salem, Ohio, attached is a copy of the October 2002 RI/FS Progress Report.

Additionally, in accordance with Paragraph 14 of the Administrative Order by Consent, signed November 17, 1993, attached is a copy of the October 2002 Removal Action Progress Report.

Please contact us if you have any questions regarding activities discussed in these reports.

Sincerely,

Rainer Domalski

Dr. Rainer F. Domalski
Manager Remediation Projects

Enclosure
cc M. Hardy – TH&F
T. Rees – Golder Associates, Inc

110602.doc

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Member of the RUTGERS Organics Group

RÜTGERS ORGANICS CORPORATION
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
SALEM, OHIO SITE
MONTHLY PROGRESS REPORT
OCTOBER 2002

1.0 INTRODUCTION

This progress report has been prepared in accordance with Paragraph XE of the Administrative Order of Consent regarding a Remedial Investigation/Feasibility Study of the Nease Chemical Site in Salem, Ohio. The report summarizes the major RI/FS actions during the month along with investigation results and any problems encountered in the project. Activities planned for next month are also presented.

2.0 SUMMARY OF ACTIVITIES PERFORMED

2.1 Project Activity Summary

The activities that were initiated and/or completed during the month are described. All activities were performed in accordance with the detailed protocol provided in the approved Work Plan.

2.2 Fieldwork

No fieldwork was performed.

2.3 Reports

2.3.1 Remedial Investigation - Endangerment Assessment (EA)

A red-lined final EA was submitted to the agencies by the end of December 2001. Based on additional information requested and received by the agencies, ROC submitted a revised Chapter VI and VIII of the EA in January 2002. In a letter dated June 26, 2002 , EPA submitted comments regarding the human health part of the EA. ROC has addressed these comments and submitted a revised document by October 30, 2002. ROC also received comments regarding the ecological part of the EA. The comments are currently under review.

2.4 Meetings

No meetings were held.

3.0 VARIATIONS FROM THE APPROVED RI/FS WORK PLAN

No variations from the approved Work Plans occurred during the month.

4.0 RESULTS OF SAMPLING, TESTS AND ANALYSES

No RI/FS sampling results/analysis were received this month.

5.0 PROJECT SCHEDULE

The attached updated Work Plan schedule identifies completion and target dates for project activities. Those scheduled to occur over the next several months include:

- Review of agencies' comment regarding ecological part of the EA
- Submit draft response to agencies

6.0 DIFFICULTIES ENCOUNTERED AND ACTION TAKEN TO RESOLVE PROBLEMS

No significant difficulties were encountered.

7.0 PERSONNEL CHANGES

Effective November 1, 2002, Dr. Rainer F. Domalski is the only project coordinator for Nease Chemical Site in Salem, Ohio.

8.0 ANTICIPATED PROJECT ACTIVITIES FOR NOVEMBER 2002

- Monthly Progress Report October 2002.

Table 1
Nease Site, Salem, Ohio
RI/FS Schedule

Date	Task/Activity/Deliverable/Milestone
February 22, 1988	Effective Date of RI/FS Administrative Order of Consent
April 5, 1991	Partial Salem RI submitted to Agencies
July 6, 1993	Salem RI submitted to Agencies
July 29-30, 1993	Source sampling event, ROC/Golder and Agencies/B&V WST
August 10, 1993	Submit monthly progress report
September 10, 1993	Submit monthly progress report
October 10, 1993	Submit monthly progress report
November 10, 1993	Submit monthly progress report
Nov./Dec., 1993	Egypt Swamp Sampling Event
December 10, 1993	Submit monthly progress report
January 10, 1994	Submit monthly progress report
February 10, 1994	Submit monthly progress report
March 10, 1994	Submit monthly progress report
March 30, 1994	Submit Supplemental Production Well Closure Plant to Agencies
April 10, 1994	Submit monthly progress report
May 10, 1994	Submit monthly progress report
June 10, 1994	Submit monthly progress report
July 10, 1994	Submit monthly progress report
August 10, 1994	Submit monthly progress report

Date	Task/Activity/Deliverable/Milestone
August 18, 1994	Submit to Agencies Additional RI Report: MFLBC
August 22, 1994	Receipt of US EPA Draft Comments on 1993 Salem RI Report
September 6, 1994	Receipt of US EPA Comments on 1993 Salem RI Report
September 10, 1994	Submit monthly progress report
September 23, 1994	Receipt of USEPA Comments on Well Closure Plan
October 7, 1994	Submit Supplemental Production Well Closure Plan (Revision #1)
October 10, 1994	Submit monthly progress report
November 8, 1994	Receipt of USEPA approval of Well Closure Plan (Revision #1)
November 10, 1994	Submit monthly progress report
December 10, 1994	Submit monthly progress report
December 13-19, 1994	Production Well Closure Field Work
January 10, 1995	Submit monthly progress report
February 10, 1995	Submit monthly progress report
February 27, 1995	Receipt of USEPA Comments to Additional Remedial Investigation Report
March 10, 1995	Submit monthly progress report
March 30, 1995	Revised MFLBC Sampling Plan submitted
April 10, 1995	Submit monthly progress report
April 25, 1995	Meet to finalize MFLBC Sampling Plan
May 10, 1995	Submit monthly progress report
June 6, 1995	Propose groundwater sampling Round 3
June 10, 1995	Submit monthly progress report

Date	Task/Activity/Deliverable/Milestone
June 30, 1995	Receive agency comments to groundwater sampling Round 3 proposal
July 5, 1995	Receive agency approval of MFLBC Sampling Plan
July 6, 1995	Submit revised Round 3 groundwater sampling proposal
July 10, 1995	Submit monthly progress report
August 1, 1995	Receive Agency approval for CAL MPK analysis
August 4, 1995	Submit Rt. 14/Feeder Creek Plan to Agencies
August 10, 1995	Submit monthly progress report
September 5-15, 1995	Anticipated MFLBC phase III Sample Collection
September 10, 1995	Submit monthly progress report
September 12, 1995	Receive agency comments on Rt. 14/Feeder Creek Sampling Plan
September 18-30, 1995	Round 3 Groundwater Collection
October 6, 1995	Submit revised Rt. 14/Feeder Creek Sampling Plan
October 25, 1995	Resubmit revised Rt. 14/Feeder Creek Sampling (Verbal Comments)
October 30-November 2, 1995	Collect Rt. 14/Feeder Creek Samples
November 10, 1995	Submit monthly progress report
December 10, 1995	Submit monthly progress report
December 28, 1995	Receive Agency comments to Remedial Investigation Report
January 10, 1996	Submit monthly progress report
January 31, 1996	Submit Revised RI Report Volumes 1, 1A, 3 and 4
February 10, 1996	Submit monthly progress report
March 10, 1996	Submit monthly progress report

Date	Task/Activity/Deliverable/Milestone
April 10, 1996	Submit monthly progress report
April 24, 1996	Meeting with agencies to discuss project status and submittal dates
May 10, 1996	Submit monthly progress report
May 24, 1996	Submit Appendix N
June 10, 1996	Submit monthly progress report
June 14, 1996	Submit Round 3 Groundwater Sampling Data
June 19, 1996	Revised RI Approved by EPA/OEPA
July 10, 1996	Submit monthly progress report
August 10, 1996	Submit monthly progress report
September 6, 1996	Submit monthly progress report
September 11, 1996	Meeting with Agencies to discuss Endangerment Assessment Comments
October 10, 1996	Submit monthly progress report, Submit revised Rt. 14/FC Investigation Results, Submit revised Eastern Plume/DNAPL Work Plan
November 10, 1996	Submit monthly progress report
December 10, 1996	Submit monthly progress report
December, 1996	Complete Fieldwork E. Plume/DNAPL Workplan
January 10, 1997	Submit monthly progress report
January 23, 1997	Piezometer (hydropunch) sampling conducted
February 7, 1997	Submit monthly progress report
March 7, 1997	Submit monthly progress report
March 25, 1997	Receive agency comments on E. Plume/DNAPL Workplan
April 10, 1997	Submit monthly progress report

Date	Task/Activity/Deliverable/Milestone
May 9, 1997	Submit monthly progress report
June 9, 1997	Submit monthly progress report
June 30, 1997	Receive Agency comments on Appendix N, RI
July 8, 1997	Submit monthly progress report
July 18, 1997	Submit revision package for Appendix N addressing agency comments
August 8, 1997	Submit DNAPL/Eastern Plume Report and Monthly progress report
August 20, 1997	Agency approval of Appendix N
September 10, 1997	Submit monthly progress report
October 10, 1997	Submit monthly progress report
November 10, 1997	Submit monthly progress report
December 10, 1997	Submit monthly progress report
December 18, 1997	Receive (12/19/97) agency comments to previously submitted EA chapters
December 18, 1997	Receive (12/29/97) USEPA Comments to Eastern Plume/DNAPL report
December 29, 1997	Receive (12/31/97) OEPA Comments to Eastern Plume/DNAPL report
January 8, 1998	Clarifications to agency EA comments requested by ROC letter
January 9, 1998	Submit monthly progress report
January 13, 1998	Telephone conference to obtain clarification on agency EA comments (human health)
January 22, 1998	Meeting in US EPA's Chicago offices to discuss Eastern Plume/DNAPL report comments
January 28, 1998	Telephone conference to obtain clarifications on agency EA comments
January 29, 1998	Telephone conference to obtain clarifications on agency EA comments (Ecological and revision schedule)
February 3, 1998	ROC letter regarding summary of previous EA clarification telephone calls

Date	Task/Activity/Deliverable/Milestone
February 10, 1998	Submit monthly progress report
February 12, 1998	Meeting in Twinsburg, OH to discuss agency comment to EA chapters and approach for finalization of remaining chapters.
March 10, 1998	Submit monthly progress report
April 1, 1998	Receiver USEPA comments to revised Eastern Plume/DNAPL report
April 8, 1998	Submit monthly progress report
April 15, 1998	Submit Complete EA
May 7, 1998	Submit monthly progress report
June 9, 1998	Submit monthly progress report
July 10, 1998	Submit monthly progress report
August 5, 1998	Revised Eastern Plume/DNAPL report submitted
August 7, 1998	Submit monthly progress report
August 14, 1998	Receive draft agency comments on EA
August 26, 1998	Meeting in Twinsburg, Ohio to discuss EA comments
September 10, 1998	Submit monthly progress report
October 8, 1998	Meeting to discuss EA technical issues (EPA office, Chicago)
October 9, 1998	Submit monthly progress report
November 6, 1998	Teleconference on EA comments
November 10, 1998	Submit monthly progress report
November 30, 1998	Receive additional agency comments on EA
December 10, 1998	Submit monthly progress report
December 15, 1998	Teleconference on EA comments

Date	Task/Activity/Deliverable/Milestone
January 6, 1999	Teleconference on EA comments (remaining item information status)
January 8, 1999	Submit monthly progress report
January 22, 1999	Submit EA Appendices
February 3, 1999	Agency MFLBC Sampling Letter received
February 9, 1999	Receive partial agency comments to EA/Appendices
February 10, 1999	Submit monthly progress report
February 23, 1999	ROC responds to MFLBC Sampling proposal
March 9, 1999	Submit monthly progress report
March 16, 1999	Receive additional agency comments to EA/Appendices, more anticipated
April 8, 1999	Receive final agency comments to EA/Appendicies
April 9, 1999	Submit monthly progress report
May 10, 1999	Submit monthly progress report
May 17, 1999	Agency response letter to ROC MFLBC sampling proposal received
June 7, 1999	Conference call to resolve details on MFLBC sampling program and locations
June 9, 1999	Submit monthly progress report
June 18, 1999	Submit revised EA
July 9, 1999	Submit monthly progress report
July 12-21, 1999	Conduct additional MFLBC field sampling work
July 28, 1999	ROC proposal for Residential well sampling program via a conference call
August 8, 1999	Submit monthly progress report
September 1, 1999	Agency approval of residential well sampling program via a conference call

Date	Task/Activity/Deliverable/Milestone
September 10, 1999	Submit monthly progress report
October 8, 1999	Submit monthly progress report
November 8, 1999	Submit monthly progress report
December 9, 1999	Submit monthly progress report
January 10, 2000	Submit monthly progress report
January 11, 2000	Conduct Residential Well Sampling Program
February 10, 2000	Submit monthly progress report
March 8, 2000	Submit monthly progress report
March 31, 2000	Submit MFLBC Date Summary Report
April 4, 2000	Submit monthly progress report
May 10, 2000	Submit monthly progress report
June 7, 2000	Submit Residential Well Sampling Results
June 8, 2000	Submit monthly progress report
July 7, 2000	Submit monthly progress report
July 31, 2000	Received agency comment letter regarding draft Endangerment Assessment
August 8, 2000	Submit monthly progress report
September 8, 2000	Submit monthly progress report
October 4, 20000	Submit monthly progress report
October 11, 2000	Agencies/ROC meeting regarding agency's comments to draft Endangerment Assessment
November 3, 2000	Submit monthly progress report
November 14, 2000	Submit parts of the revised Endangerment Assessment (Chapter 1 – 4, 9)
December 8, 2000	Submit monthly progress report

Date	Task/Activity/Deliverable/Milestone
December 12, 2000	Submit parts of the revised Endangerment Assessment (Chapter 10)
January 4, 2001	Submit monthly progress report
February 6, 2001	Submit monthly progress report
March 8, 2001	Submit monthly progress report
April 9, 2001	Submit monthly progress report
April 11, 2001	Received agencies' comments regarding Appendix I
May 8, 2001	Submit monthly progress report
May 18, 2001	Received agencies' comments regarding Appendix I
June 6, 2001	Submit monthly progress report
July 6, 2001	Submit monthly progress report
August 7, 2001	Submit monthly progress report
August 20, 2001	Received agencies' comments regarding indoor air
September 7, 2001	Received agencies' comments regarding dermal exposure
September 10, 2001	Submit monthly progress report
September 18, 2001	Initial response to agencies' September 7, 2001 letter
October 5, 2001	Submit Monthly progress report
October 19, 2001	Received agencies' comment letter regarding EA issues
November 2, 2001	Response to agencies' comments October 19, 2001
November 7, 2001	Submit monthly progress report
December 7, 2001	Submit monthly progress report
December 28, 2001	Submit draft final Endangerment Assessment (Human Health)
January 9, 2001	Submit monthly progress report
January 25, 2002	Submit revised EA Chapters VI and VIII
February 8, 2002	Submit monthly progress report
March 5, 2002	Submit monthly progress report
April 5, 2002	Submit monthly progress report
May 8, 2002	Submit monthly progress report

Date	Task/Activity/Deliverable/Milestone
June 5, 2002	Submit monthly progress report
July 8, 2002	Submit monthly progress report
August 9, 2002	Submit monthly progress report
August 26, 2002	EPA submit comments regarding ecological part of EA
September 10, 2002	Submit monthly progress report
October 10, 2002	Submit monthly progress report
October 30, 2002	Submit Draft Endangerment Assessment (Human Health Part)
November 6, 2002	Submit monthly progress report

RÜTGERS ORGANI0CS CORPORATION
REMOVAL ACTION
SALEM, OHIO SITE
MONTHLY PROGRESS REPORT
OCTOBER 2002

1.0 INTRODUCTION

This progress report has been prepared in accordance with Paragraph 14 of the "Order" section of the Administrative Order by Consent (AOC) Docket No. V-W-94-C-212, effective November 17, 1993, regarding a Removal Action at the Nease Chemical Site in Salem, Ohio. The report summarizes the major activities during the month along with investigation results and any problems encountered on the project. Activities planned for next month are also presented.

2.0 SUMMARY OF ACTIVITIES PERFORMED

2.1 Project Activity

The activities that were initiated and/or completed during this month are described below. Activities were performed in accordance with the Removal Action AOC.

2.2 Work Plan Preparation/Reports

No work plans/reports were submitted this period.

2.3 Fieldwork

2.3.1 Site Inspections

The results of the monthly site inspection carried out at the site on October 31, 2002 are shown in Attachment 1.

2.3.2 Monthly Water Level Measurements

Water level measurements taken in monitoring wells at the site on October 31, 2002 are provided in Attachment 2.

2.3.3 Treatment Plant Operation

The treatment plant operated normally throughout the month.

2.4.1.1 Meetings

No meetings were held this month.

3.0 VARIATIONS FROM THE APPROVED REMOVAL ACTION WORK PLAN

There were no variations from the approved Removal Action Work Plan for the month.

4.0 RESULTS OF INSPECTIONS, ENVIRONMENTAL SAMPLING, TESTS AND ANALYSES

Water monitoring samples were collected from the treatment plant during the month. Attachments 3 to 5 include results from water and air samples collected on September 16, 2002, October 1, 2002 and October 15, 2002. Attachment 4 and 6 present results of two acute toxicity evaluations dated September 17 through September 21, 2002. The tests were performed by American Aquatic Testing. Inc..

5.0 PROJECT SCHEDULE

The attached and updated Work Plan schedule identifies completion and target dates for project activities.

6.0 DIFFICULTIES ENCOUNTERED AND ACTION TAKEN TO RESOLVE PROBLEMS

- No significant difficulties were reported this month

7.0 PERSONNEL CHANGES

Effective November 1, 2002, Dr. Rainer F. Domalski is the only project coordinator for Nease Chemical Site in Salem, Ohio.

8.0 TYPES AND QUANTITIES OF REMOVED MATERIALS

For the period from October 1 through October 31, 2002, the following material was removed:

- No leachate and/or backwash water were disposed off-site at a licensed treatment facility.
- Approximately 98,208 gallons were pumped from Leachate Collection System 1 (LCS-1) (total for LCS-1 =13,189,955 gallons).
- Approximately 2,159 gallons were pumped from Leachate Collection System 2 (LCS-2) (total for LCS-2 = 910,068 gallons).
- No water was pumped from Pond 1 (total for the pond = 872,618

gallons).

- Approximately 6.15 pounds of organic compounds were removed during pumping (estimate based on average VOC/SVOC concentrations for each source).

9.0 ANTICIPATED PROJECT ACTIVITIES FOR NOVEMBER 2002

Removal Action activities scheduled for the upcoming month include on-going implementation of the approved Removal Action Work Plan involving:

- Collection of groundwater from the existing collection systems LCS-1, LCS-2 and Pond 1.
- Monthly Progress Report

Table 1
Nease Site, Salem, Ohio
Removal Action Schedule

Date	Task/Activity/Deliverable/Milestone
November 17, 1993	Removal AOC Effective Date
November 17, 1993	Commence Preparation of Removal Action Work Plan
November 23, 1993	Submit Treatment Plant Performance Evaluation Work Plan (Rev. #1)
November 28, 1993	USEPA Conditional Approval of TPPEWP
December 1, 1993	Commence Treatment Plant Performance Evaluation
December 9, 1993	Complete Treatment Plant Performance Evaluation
December 10, 1993	Submit monthly progress report
December 17, 1993	Submit Removal Action Work Plan (Rev #0) to USEPA
January 3, 1994	USEPA Approval of TPPEWP (Rev #1)
January 10, 1994	Submit monthly progress report
January 15, 1994	Complete Treatment Plant Data Analysis and Evaluation
January 17, 1994	Notify EPA of inability of Treatment Plant to meet proposed discharge criteria. Commence preparation of Treatment Plant Modifications Work Plan (TPMWP)
January 24, 1994	USEPA disapproval of Removal Action Work Plan (Rev. #0) and associated comments
February 4, 1994	Submit Revised Removal Action Work Plan (Rev #1) and Response to Agency comments
February 10, 1994	Submit monthly progress report
February 11, 1994	Submit Treatment Plant Performance Evaluation Report (TPPER)
March 2, 1994	Submit Treatment Plant Modifications Work Plan (TPMWP, Rev. #0)
March 10, 1994	Submit monthly progress report
April 10, 1994	Submit monthly progress report

Date	Task/Activity/Deliverable/Milestone
April 13, 1994	Submit Revised Removal Action Work Plan (Rev #2) and Response to Agency comments
April 20, 1994	Submit Revised TPMWP (Rev #1) and Response to Agency comments
May 10, 1994	Submit monthly progress report
May 13, 1994	Submit Updates (Rev #3) to Removal Action Work Plan (Rev #2) and Response to Agency comments
May 25, 1994	USEPA approval of Revised RA Work Plan (Rev #2). Commence work on Work Plan implementation
May 25, 1994	Commence Preparation of Removal Action WP Addendum
June 1, 1994	Receipt of USEPA approval of Revised RA Work Plan (Rev #3)
June 10, 1994	Submit monthly progress report
June 24, 1994	Submit TPMWP (Rev #2)
July 10, 1994	Submit monthly progress report
July 26, 1994	Submit Treatment Plant Modifications Design Technical Memorandum (TPMDTM, Rev #0)
July 28, 1994	Receipt of USEPA approval of TPMWP (Rev #2 with revised Table 4)
August 10, 1994	Submit monthly progress report
August 30, 1994	Submit Removal Action Work Plan Addendum (RAWPA)
September 10, 1994	Submit monthly progress report
September 23, 1994	Receipt of USEPA Comments or TPMDTM
October 3, 1994	Submit TPMDTM (Rev #1)
October 4, 1994	Submit TPMDTM (Rev #1)
October 10, 1994	Submit monthly progress report
November 9, 1994	Submit TPMDM (Rev #2)
November 10, 1994	Submit monthly progress report

Date	Task/Activity/Deliverable/Milestone
December 1, 1994	Receipt of USEPA approval of TPMDTM (Rev #2)
December 10, 1994	Submit monthly progress report
December 12-19, 1994	RAWPA Extraction Well and Piezometer Installation
January 10, 1995	Submit monthly progress report
January/February/ March, 1995	Construction of TPMWP/TPMDTM measures
February 10, 1995	Submit monthly progress report
March 10, 1995	Submit monthly progress report
March 13-16, 1995	Performance of Field Pumping Tests (E4 and S7)
April 10, 1995	Submit monthly progress report
April 24, 1995	Submit status report on RAWPA, Task 5
May 4, 1995	Start on-site treatment plant
May 10, 1995	Submit monthly progress report
June 10, 1995	Submit monthly progress report
July 10, 1995	Submit monthly progress report
July 21, 1995	Submit treatment plant 1st month operation summary report
July 26, 1995	Submit Cone penetrometer testing report and additional investigation plan
August 10, 1995	Submit monthly progress report
September 10, 1995	Submit monthly progress report
October 10, 1995	Submit monthly progress report
November 10, 1995	Submit monthly progress report
December 10, 1995	Submit monthly progress report

Date	Task/Activity/Deliverable/Milestone
January 8-12, 1996	Conduct 2nd Round of cone penetrometer testing on site
January 10, 1996	Submit monthly progress report
February 10, 1996	Submit monthly progress report
March 10, 1996	Submit monthly progress report
April 10, 1996	Submit monthly progress report
April 18, 1996	Discontinue Outfall Discharge
April 24, 1996	Agency Meeting – Discuss CPT results and future action plan
May 10, 1996	Submit monthly progress report
May 23, 1996	Submit 1996 IRM Seep Investigation and Fabric Barrier Work Plan
June 10, 1996	Submit monthly progress report
July 8-12, 1996	Install Piezometers and modify fabric barriers
July 10, 1996	Submit monthly progress report
August 6, 1996	Submit monthly progress report
September 10, 1996	Submit monthly progress report
October 10, 1996	Submit monthly progress report
November 10, 1996	Submit monthly progress report
December 10, 1996	Submit monthly progress report
January 10, 1997	Submit monthly progress report
February 10, 1997	Submit monthly progress report
March 10, 1997	Submit monthly progress report
April 10, 1997	Submit monthly progress report

Date	Task/Activity/Deliverable/Milestone
May 9, 1997	Submit monthly progress report
May 13, 1997	Sample seep piezometers
June 9, 1997	Submit monthly progress report
July 8, 1997	Submit monthly progress report
August 8, 1997	Submit monthly progress report
September 10, 1997	Submit monthly progress report
October 10, 1997	Submit monthly progress report
November 10, 1997	Submit monthly progress report
December 10, 1997	Submit monthly progress report
January 9, 1998	Submit monthly progress report
February 10, 1998	Submit monthly progress report
March 10, 1998	Submit monthly progress report
April 8, 1998	Submit monthly progress report
May 7, 1998	Submit monthly progress report
June 9, 1998	Submit monthly progress report
June 30, 1998	Sample Seep Sheen
July 10, 1998	Submit monthly progress report
August 7, 1998	Submit monthly progress report
August 19, 1998	Install 1 new fabric barrier and remover 1 old one
September 10, 1998	Submit monthly progress report
October 9, 1998	Submit monthly progress report

Date	Task/Activity/Deliverable/Milestone
November 10, 1998	Submit monthly progress report
December 10, 1998	Submit monthly progress report
January 8, 1999	Submit monthly progress report
February 10, 1999	Submit monthly progress report
March 9, 1999	Submit monthly progress report
April 9, 1999	Submit monthly progress report
May 10, 1999	Submit monthly progress report
June 9, 1999	Submit monthly progress report
July 9, 1999	Submit monthly progress report
August 9, 1999	Submit monthly progress report
September 10, 1999	Submit monthly progress report
October 8, 1999	Submit monthly progress report
November 8, 1999	Submit monthly progress report
December 9, 1999	Submit monthly progress report
January 10, 2000	Submit monthly progress report
February 10, 2000	Submit monthly progress report
March 8, 2000	Submit monthly progress report
April 4, 2000	Submit monthly progress report
May 10, 2000	Submit monthly progress report
June 8, 2000	Submit monthly progress report
July 7, 2000	Submit monthly progress report

Date	Task/Activity/Deliverable/Milestone
August 8, 2000	Submit monthly progress report
September 8, 2000	Submit monthly progress report
October 4, 2000	Submit monthly progress report
November 3, 2000	Submit monthly progress report
December 8, 2000	Submit monthly progress report
January 4, 2001	Submit monthly progress report
February 6, 2001	Submit monthly progress report
March 8,2001	Submit monthly progress report
April 9, 2001	Submit monthly progress report
May 8, 2001	Submit monthly progress report
June 6, 2001	Submit monthly progress report
July 6, 2001	Submit monthly progress report
August 7, 2001	Submit monthly progress report
September 10, 2001	Submit monthly progress report
October 5, 2001	Submit monthly progress report
November 7, 2001	Submit monthly progress report
December 7, 2001	Submit monthly progress report
January 9, 2002	Submit monthly progress report
February 8, 2002	Submit monthly progress report
March 5, 2002	Submit monthly progress report
April 5, 2002	Submit monthly progress report
May 8, 2002	Submit monthly progress report
June 5, 2002	Submit monthly progress report
July 8, 2002	Submit monthly progress report
August 9, 2002	Submit monthly progress report
September 10, 2002	Submit monthly progress report

Date	Task/Activity/Deliverable/Milestone
October 10, 2002	Submit monthly progress report
November 6, 2002	Submit monthly progress report

Attachment 1
Results of Monthly Site Inspection
October 2002

Site Inspection Form
Ruetgers Organics Corporation
Nease Site, Salem, Ohio

Date of inspection: October 31, 2002
Entry Time: 10:00
Exit Time: 5:00

Weather: Sunny, cool

Inspector's Name: Harry Bircher
Inspector's Company: Howells & Baird, Inc.

INSPECTION RESULTS

SPECIFIC OBSERVATIONS: STRUCTURES

(Responces: S = Satisfactory, U = Unsatisfactory, Yes/No, Levels in Ft , NA = Not Applicable)

	Pump	Quick Connect	Water Level	Berm Erosion	Visible Leakage
Leachate Collection System 1 (LCS 1)	S	S	7.93	NA	NO
Leachate Collection System 2 (LCS 2)	S	S	11.10	NA	NO
Pond 1 Pumphouse	S	S	11.30	NA	NO
Pond 1 Berm	NA	NA	NA	NO	NO
Pond 2 Embankment	NA	NA	NA	NO	NO
Exclusion Area A Embankment	NA	NA	NA	NO	NO
Storage Tank	NA	S	5 90	NA	NO

SPECIFIC OBSERVATION: SEDIMENT BARRIERS
Condition of sediment barriers

Barrier ID	Fabric Intact?	Bypass Evident	Needs Maint
Sediment Control Structure 1	YES	NO	NO
Sediment Control Structure 2	YES	NO	NO
Fabric Barrier 2	YES	NO	NO
Fabric Barrier 3	YES	NO	NO
Fabric Barrier 4	YES	NO	NO
Fabric Barrier 4a	YES	NO	NO
Fabric Barrier 5	YES	NO	NO
Fabric Barrier 8	YES	NO	NO
Fabric Barrier 9	YES	NO	NO
Fabric Barrier 10	YES	NO	NO
Rock Barrier 1	YES	NO	NO
Rock Barrier 2	YES	NO	NO
Pond 7 - North	YES	NO	NO
Pond 7 - South	YES	NO	NO

Site Inspection Form
Ruetgers Organics Corporation
Nease Site, Salem, Ohio

SPECIFIC OBSERVATIONS: SEEPS

Seep ID	Located on Map	Area (ft^2)	Magnitude Flow?, Ponding?
94-7-1	YES	20	Non-flowing seep
96-8-2	YES	20	Non-flowing seep

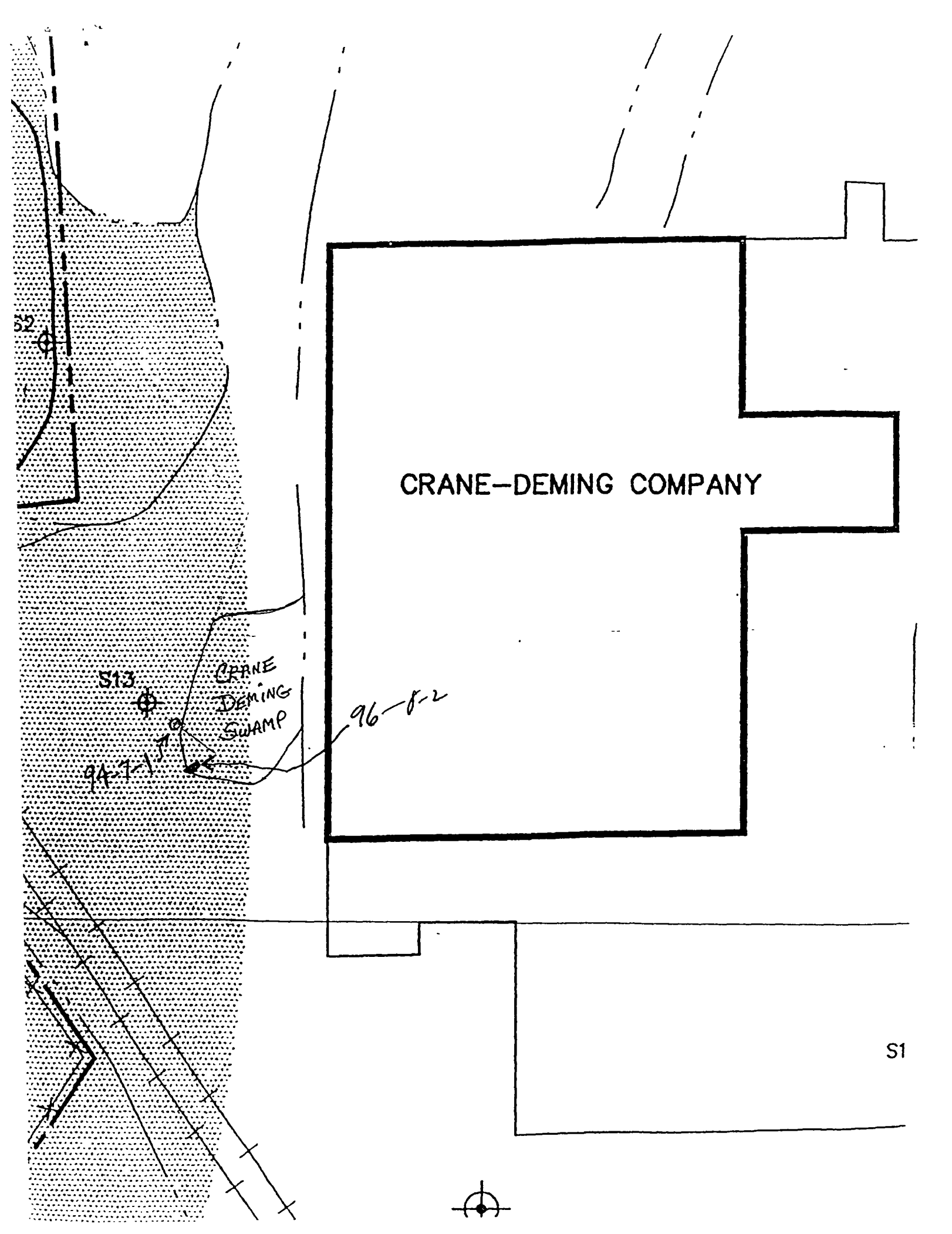
Inspector's Name

Harry Bircher

Inspector's Signature

Date

Oct. 31, 2002


CRANE–DEMING COMPANY
S13
CRANE DEMING SWAMP
96-8-2
94-7-1
S1

Attachment 2
Results of Monthly Water Level Measurements
October 2002

Monthly Monitoring Well Water Level Measurement Form
Ruetgers Organics Corporation
Nease Site, Salem, Ohio

Date of Inspection: October 31, 2002
Entry Time: 10.00 **Exit Time:** 5:00

Inspector's Name: Harry Bircher
Inspector's Company: Howells & Baird

Inspector's Signature 

Well Number	Depth to Water (feet)	Casing & Lock Intact?	Date	Comments
AUBA	30.78	Yes	Oct. 31	
A-S	13 34	Yes	Oct. 31	
B-S	10 22	Yes	Oct. 31	
C-S	11 75	Yes	Oct. 31	
CLBA	13 23	Yes	Oct. 31	
CUBA	12 20	Yes	Oct. 31	
D-1	24.54	Yes	Oct 31	
D-2	25 98	Yes	Oct. 31	
D-3	11 31	Yes	Oct 31	
D-4	21.86	Yes	Oct 31	
D-5	33.46	Yes	Oct 31	
D-6	21.85	Yes	Oct. 31	
D-7	4.28	Yes	Oct. 31	
D-8	3.02	Yes	Oct 31	
D-9	15 91	Yes	Oct. 31	
D-10	11.92	Yes	Oct. 31	
D-11	25.06	Yes	Oct. 31	
D-12	23.56	Yes	Oct 31	
D-13	30 84	Yes	Oct. 31	
D-14	7.24	Yes	Oct. 31	
D-15	8.13	Yes	Oct 31	
D-16	0.15	Yes	Oct 31	
D-17	5.65	Yes	Oct. 31	
DLBA	0.00	Yes	Oct 31	1.2 PSI
DVF2	0.00	Yes	Oct 31	Bolted Shut
DVF3	4.97	Yes	Oct. 31	
ELBA	3 80	Yes	Oct. 31	
EVF1	11.85	Yes	Oct 31	
EVF2	11.63	Yes	Oct. 31	
EVF3	10 07	Yes	Oct. 31	
EVF4	6.25	Yes	Oct 31	
EW-4	13 43	Yes	Oct. 31	
EW-5	18.06	Yes	Oct 31	
FLBA	12 39	Yes	Oct. 31	
FVF3	13.90	Yes	Oct 31	Stream level = 0 0'
FVF4	14 76	Yes	Oct. 31	

Monthly Monitoring Well Water Level Measurement Form
Ruetgers Organics Corporation
Nease Site, Salem, Ohio

Date of Inspection: October 31, 2002
Entry Time: 10:00 **Exit Time:** 5:00

Inspector's Name: Harry Bircher
Inspector's Company: Howells & Baird

Inspector's Signature _____

Well Number	Depth to Water (feet)	Casing & Lock Intact?	Date	Comments
FVF6	12.39	Yes	Oct 31	
GUBA	3.82	Yes	Oct. 31	
H-S	10.66	Yes	Oct. 31	
HUBA	17.94	Yes	Oct. 31	
HVF1	18.16	Yes	Oct. 31	
I-SHALE	20.20	Yes	Oct. 31	
ILBA	49 36	Yes	Oct 31	
I-S	20.01	Yes	Oct. 31	
IUBA	36.67	Yes	Oct. 31	
JLBA	6.32	Yes	Oct 31	
JVF2	13.17	Yes	Oct. 31	Stream Marker Gone
JVF3	10.63	Yes	Oct. 31	
JVF4	8.93	Yes	Oct 31	
KLBA	0.61	Yes	Oct. 31	
KVF2	0.85	Yes	Oct. 31	
KVF4	3 12	Yes	Oct. 31	
LBA	23.95	Yes	Oct. 31	
LVF1	21.95	Yes	Oct 31	
LVF2	18.83	Yes	Oct 31	
P-1A	8 84	Yes	Oct. 31	
P-2A	13.01	Yes	Oct. 31	
P-3A	12 22	Yes	Oct. 31	
P-1U	40 14	Yes	Oct 31	
P-1L	35.91	Yes	Oct. 31	
P-2U	29.90	Yes	Oct. 31	
P-2L	43.31	Yes	Oct. 31	
PZ-1	16.12	Yes	Oct. 31	
PZ-2	20 02	Yes	Oct 31	
PZ-3S	13.99	Yes	Oct. 31	
PZ-3M	25 44	Yes	Oct. 31	
PZ-3B	33.18	Yes	Oct. 31	
PZ-4S	13 92	Yes	Oct. 31	
PZ-4M	22.24	Yes	Oct. 31	
PZ-4B	27.83	Yes	Oct. 31	
PZ-5S	7 18	Yes	Oct 31	
PZ-5M	18.61	Yes	Oct. 31	

Monthly Monitoring Well Water Level Measurement Form
Ruetgers Organics Corporation
Nease Site, Salem, Ohio

Date of Inspection: October 31, 2002
Entry Time: 10 00 **Exit Time:** 5:00

Inspector's Name: Harry Bircher
Inspector's Company: Howells & Baird

Inspector's Signature _____

Number	Water (feet)	Lock Intact?	Date	Comments
PZ-5T	17.97	Yes	Oct. 31	
PZ-5B	19.36	Yes	Oct 31	
PZ-6B-U	17.45	Yes	Oct. 31	
PZ-6B-M	16.33	Yes	Oct. 31	
PZ-6B-L	14 39	Yes	Oct. 31	
PZ-7	9 51	Yes	Oct. 31	
RW-1	25.86	Yes	Oct 31	
S-1	16.95	Yes	Oct. 31	
S-2	9.69	Yes	Oct. 31	
S-3	7.64	Yes	Oct 31	
S-4	4.81	Yes	Oct. 31	
S-5	15.76	Yes	Oct. 31	Dry
S-6	7.86	Yes	Oct. 31	
S-7	11.30	Yes	Oct 31	Dry
S-8	2.42	No	Oct. 31	
S-9	18 83	Yes	Oct. 31	
S-10	13.58	Yes	Oct. 31	
S-11	10.74	Yes	Oct. 31	
S-12	6.29	Yes	Oct. 31	
S-13	6.32	Yes	Oct. 31	
S-14	3.15	Yes	Oct. 31	
S-15	2.98	Yes	Oct. 31	
S-16	13 26	Yes	Oct 31	
S-17	3 06	Yes	Oct. 31	
S-18	12 02	Yes	Oct. 31	
S-19	0.00	Yes	Oct. 31	
SP-1	5.20	Yes	Oct. 31	
SP-2	5.10	Yes	Oct. 31	
SP-3	5.12	Yes	Oct. 31	
SP-4	5.42	Yes	Oct. 31	
SP-5	5.03	Yes	Oct. 31	
SP-6	4.67	Yes	Oct. 31	

Attachment 3

Water/Air Sampling Results – September 15, 2002

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Analytical Report

RUTGERS ORGANICS CORPORATION/EHS DEPT.
201 STRUBLE ROAD
STATE COLLEGE , PA 16801
Account Number: 155

Contact: RAINER DOMALSKI

Date Received: 17-SEP-02
Date Reported: 02-OCT-02

Invoice Number: 30474

Date Collected: 16-SEP-02

Client ID. INFLUENT 9-16-02

Lab ID: L33672-1

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
BOD-5 DAY	mg/L	50	1	EPA 405 1	18-SEP-02	CEB
IRON-LOW LEVEL	mg/L	11.6	.0005	EPA 200.8	19-SEP-02	JMS
PESTICIDE ANALYSIS						
KEPONE	ug/L	U .042	.042	SOP 6.2	25-SEP-02	CS
PHOTOMIREX	ug/L	U .006	006	SOP 6.2	25-SEP-02	CS
MIREX	ug/L	U 002	.002	SOP 6.2	25-SEP-02	CS
PH	PH UNITS	7.2	0	EPA 150 1	18-SEP-02	CEB
TOTAL DISSOLVED SOLIDS	mg/L	840	1	EPA 160.1	18-SEP-02	SHZ
TOTAL SUSPENDED SOLIDS	mg/L	24 6	1	EPA 160.2	18-SEP-02	SHZ

Comments: Please see Narrative L33672 for comments related to this sample.

Submitted by
Exygen Research
Reviewed and Approved by

Charles Simons
Laboratory Manager

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Analytical Report

RUTGERS ORGANICS CORPORATION/EHS DEPT.
201 STRUBLE ROAD
STATE COLLEGE , PA 16801
Account Number: 155

Contact: RAINER DOMALSKI

Date Received: 17-SEP-02
Date Reported: 02-OCT-02

Invoice Number: 30474

Date Collected: 16-SEP-02

Client ID: LGAC1-2 9-16-02

Lab ID. L33672-2

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
BOD-5 DAY	mg/L	< 1	1	EPA 405.1	18-SEP-02	CEB
IRON-LOW LEVEL	mg/L	.968	.0005	EPA 200.8	19-SEP-02	JMS
PESTICIDE ANALYSIS						
KEPONE	ug/L	U .042	.042	SOP 6.2	25-SEP-02	CS
PHOTOMIREX	ug/L	U .006	.006	SOP 6 2	25-SEP-02	CS
MIREX	ug/L	U .002	.002	SOP 6.2	25-SEP-02	CS
PH	PH UNITS	8.23	0	EPA 150.1	18-SEP-02	CEB
TOTAL DISSOLVED SOLIDS	mg/L	790	1	EPA 160.1	18-SEP-02	SHZ
TOTAL SUSPENDED SOLIDS	mg/L	4	1	EPA 160.2	18-SEP-02	SHZ
VOLATILE ANALYSIS						
VINYL CHLORIDE	ug/L	< 10	10	EPA 8260B	25-SEP-02	CP
DICHLOROMETHANE	ug/L	< 5	5	EPA 8260B	25-SEP-02	CP
1,1-DICHLOROETHENE	ug/L	< 5	5	EPA 8260B	25-SEP-02	CP
CIS-1,2-DICHLOROETHENE	ug/L	< 5	5	EPA 8260B	25-SEP-02	CP
TRANS-1,2-DICHLOROETHENE	ug/L	< 5	5	EPA 8260B	25-SEP-02	CP
CHLOROFORM	ug/L	< 5	5	EPA 8260B	25-SEP-02	CP
1,2-DICHLOROETHANE	ug/L	< 5	5	EPA 8260B	25-SEP-02	CP
1,1,1-TRICHLOROETHANE	ug/L	< 5	5	EPA 8260B	25-SEP-02	CP
1,1,2,2-TETRACHLOROETHANE	ug/L	< 5	5	EPA 8260B	25-SEP-02	CP
1,2-DICHLOROPROPANE	ug/L	< 5	5	EPA 8260B	25-SEP-02	CP
TRICHLOROETHENE	ug/L	< 5	5	EPA 8260B	25-SEP-02	CP
BENZENE	ug/L	< 5	5	EPA 8260B	25-SEP-02	CP
TETRACHLOROETHENE	ug/L	< 5	5	EPA 8260B	25-SEP-02	CP
TOLUENE	ug/L	< 5	5	EPA 8260B	25-SEP-02	CP
CHLOROBENZENE	ug/L	< 5	5	EPA 8260B	25-SEP-02	CP
ETHYLBENZENE	ug/L	< 5	5	EPA 8260B	25-SEP-02	CP
M,P-XYLENE	ug/L	< 5	5	EPA 8260B	25-SEP-02	CP
O-XYLENE	ug/L	< 5	5	EPA 8260B	25-SEP-02	CP
ACETONE	ug/L	< 10	10	EPA 8260B	25-SEP-02	CP

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Date Reported 02-OCT-02

Invoice Number 30474

Date Collected: 16-SEP-02

Client ID: LGAC1-2 9-16-02

Lab ID. L33672-2

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
2-BUTANONE	ug/L	< 10	10	EPA 8260B	25-SEP-02	CP
CHLOROMETHANE	ug/L	< 10	10	EPA 8260B	25-SEP-02	CP
CIS-1,3-DICHLOROPROPENE	ug/L	< 5	5	EPA 8260B	25-SEP-02	CP
TRANS-1,3-DICHLOROPROPENE	ug/L	< 5	5	EPA 8260B	25-SEP-02	CP
BROMOFORM	ug/L	< 5	5	EPA 8260B	25-SEP-02	CP
DIBROMOCHLOROMETHANE	ug/L	< 5	5	EPA 8260B	25-SEP-02	CP
BROMODICHLOROMETHANE	ug/L	< 5	5	EPA 8260B	25-SEP-02	CP
CARBON TETRACHLORIDE	ug/L	< 5	5	EPA 8260B	25-SEP-02	CP
BROMOMETHANE	ug/L	< 10	10	EPA 8260B	25-SEP-02	CP

Comments: <none>

Submitted by
Exygen Research
Reviewed and Approved by.

Charles Simons
Laboratory Manager

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Account Number: 155

Contact: RAINER DOMALSKI

Date Received: 17-SEP-02
Date Reported 10-OCT-02

Invoice Number: 30474

Date Collected: 16-SEP-02

Client ID OUTFALL 9-16-02

Lab ID. L33672-3

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
SILVER-LOW LEVEL	mg/L	< .0003	.0003	EPA 200 8	19-SEP-02	JMS
ALUMINUM-LOW LEVEL	mg/L	.0485	0005	EPA 200.8	19-SEP-02	JMS
ARSENIC-LOW LEVEL	mg/L	.0652	.0003	EPA 200.8	19-SEP-02	JMS
BERYLLIUM-LOW LEVEL	mg/L	< 0004	.0004	EPA 200.8	19-SEP-02	JMS
BOD-5 DAY	mg/L	< 1	1	EPA 405.1	18-SEP-02	CEB
CADMIUM-LOW LEVEL	mg/L	< .0003	.0003	EPA 200.8	19-SEP-02	JMS
CYANIDE-FREE	mg/L	< .005	.005	EPA 335.2	16-SEP-02	JPB
COD	mg/L	91.3	5	EPA 410.4	19-SEP-02	SHZ
CHROMIUM-LOW LEVEL	mg/L	.00122	.0006	EPA 200.8	19-SEP-02	JMS
COPPER-LOW LEVEL	mg/L	.00124	.001	EPA 200.8	19-SEP-02	JMS
IRON-LOW LEVEL	mg/L	1.48	0005	EPA 200.8	19-SEP-02	JMS
MERCURY	mg/L	< .0002	.0002	EPA 245.1	07-OCT-02	SUB
PESTICIDE ANALYSIS						
KEPONE	ug/L	U .042	.042	SOP 6.2	25-SEP-02	CS
PHOTOMIREX	ug/L	U 006	.006	SOP 6.2	25-SEP-02	CS
MIREX	ug/L	U .002	.002	SOP 6.2	25-SEP-02	CS
AMMONIA	mg/L	2.45	.2	EPA 350 3 MOD	20-SEP-02	CEB
NICKEL-LOW LEVEL	mg/L	.00919	0006	EPA 200.8	19-SEP-02	JMS
OIL & GREASE	mg/L	< 10	10	EPA 413.1	27-SEP-02	SUB

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Client ID: OUTFALL 9-16-02

Lab ID: L33672-3

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
LEAD-LOW LEVEL	mg/L	< 0003	.0003	EPA 200.8	19-SEP-02	JMS
PESTICIDE/PCB ANALYSIS						
METHOXYCHLOR	ug/L	< .004	.004	EPA 608	25-SEP-02	CAK
PH	PH UNITS	8.21	0	EPA 150 1	18-SEP-02	CEB
ANTIMONY-LOW LEVEL	mg/L	.000927	0004	EPA 200.8	19-SEP-02	JMS
SEMI-VOLATILE ANALYSIS						
ANTHRACENE	ug/L	< 10	10	EPA 8270C	20-SEP-02	CS
BENZO(A)ANTHRACENE	ug/L	< 10	10	EPA 8270C	20-SEP-02	CS
BENZO(K)FLUORANTHENE	ug/L	< 10	10	EPA 8270C	20-SEP-02	CS
3,4-BENZOFLUORANTHENE	ug/L	< 10	10	EPA 8270C	20-SEP-02	CS
BENZO(B)FLUORANTHENE	ug/L	< 10	10	EPA 8270C	20-SEP-02	CS
BENZO(G,H,I)PERYLENE	ug/L	< 10	10	EPA 8270C	20-SEP-02	CS
BENZO(A)PYRENE	ug/L	< 10	10	EPA 8270C	20-SEP-02	CS
CHRYSENE	ug/L	< 10	10	EPA 8270C	20-SEP-02	CS
DIBENZ(A,H)ANTHRACENE	ug/L	< 10	10	EPA 8270C	20-SEP-02	CS
FLUORENE	ug/L	< 10	10	EPA 8270C	20-SEP-02	CS
INDENO(1,2,3-CD)PYRENE	ug/L	< 10	10	EPA 8270C	20-SEP-02	CS
NAPHTHALENE	ug/L	< 10	10	EPA 8270C	20-SEP-02	CS
PHENANTHRENE	ug/L	< 10	10	EPA 8270C	20-SEP-02	CS
PYRENE	ug/L	< 10	10	EPA 8270C	20-SEP-02	CS
PHENOL	ug/L	< 10	10	EPA 8270C	20-SEP-02	CS
4-METHYLPHENOL	ug/L	< 10	10	EPA 8270C	20-SEP-02	CS
1,3-DICHLOROBENZENE	ug/L	< 10	10	EPA 8270C	20-SEP-02	CS
1,4-DICHLOROBENZENE	ug/L	< 10	10	EPA 8270C	20-SEP-02	CS
1,2-DICHLOROBENZENE	ug/L	< 10	10	EPA 8270C	20-SEP-02	CS
DIMETHYL PHTHALATE	ug/L	< 10	10	EPA 8270C	20-SEP-02	CS
BUTYLBENZYL PHTHALATE	ug/L	< 10	10	EPA 8270C	20-SEP-02	CS
DI-N-BUTYL PHTHALATE	ug/L	< 10	10	EPA 8270C	20-SEP-02	CS
2-METHYLNAPHTHALENE	ug/L	< 10	10	EPA 8270C	20-SEP-02	CS
3,4-DICHLORONITROBENZENE	ug/L	< 10	10	EPA 8270C	20-SEP-02	CS
DIPHENYL SULFONE	ug/L	< 10	10	EPA 8270C	20-SEP-02	CS

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STATE COLLEGE , PA 16801
Account Number: 155

Contact: RAINER DOMALSKI

Date Received: 17-SEP-02
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Date Collected: 16-SEP-02

Client ID: OUTFALL 9-16-02

Lab ID: L33672-3

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
TOTAL DISSOLVED SOLIDS	mg/L	796	1	EPA 160.1	18-SEP-02	SHZ
THALLIUM-LOW LEVEL	mg/L	< .0002	.0002	EPA 200.8	19-SEP-02	JMS
TOTAL ORGANIC CARBON	mg/L	< .5	5	EPA 415.1	20-SEP-02	CEB
TOTAL SUSPENDED SOLIDS	mg/L	2.9	1	EPA 160.2	18-SEP-02	SHZ
VOLATILE ANALYSIS						
VINYL CHLORIDE	ug/L	< 10	10	EPA 8260B	30-SEP-02	CP
DICHLOROMETHANE	ug/L	< 5	5	EPA 8260B	30-SEP-02	CP
1,1-DICHLOROETHENE	ug/L	< 5	5	EPA 8260B	30-SEP-02	CP
CIS-1,2-DICHLOROETHENE	ug/L	< 5	5	EPA 8260B	30-SEP-02	CP
TRANS-1,2-DICHLOROETHENE	ug/L	< 5	5	EPA 8260B	30-SEP-02	CP
CHLOROFORM	ug/L	< 5	5	EPA 8260B	30-SEP-02	CP
1,2-DICHLOROETHANE	ug/L	< 5	5	EPA 8260B	30-SEP-02	CP
1,1,1-TRICHLOROETHANE	ug/L	< 5	5	EPA 8260B	30-SEP-02	CP
1,1,2,2-TETRACHLOROETHANE	ug/L	< 5	5	EPA 8260B	30-SEP-02	CP
1,2-DICHLOROPROPANE	ug/L	< 5	5	EPA 8260B	30-SEP-02	CP
TRICHLOROETHENE	ug/L	< 5	5	EPA 8260B	30-SEP-02	CP
BENZENE	ug/L	< 5	5	EPA 8260B	30-SEP-02	CP
TETRACHLOROETHENE	ug/L	< 5	5	EPA 8260B	30-SEP-02	CP
TOLUENE	ug/L	< 5	5	EPA 8260B	30-SEP-02	CP
CHLOROBENZENE	ug/L	< 5	5	EPA 8260B	30-SEP-02	CP
ETHYLBENZENE	ug/L	< 5	5	EPA 8260B	30-SEP-02	CP
M,P-XYLENE	ug/L	< 5	5	EPA 8260B	30-SEP-02	CP
O-XYLENE	ug/L	< 5	5	EPA 8260B	30-SEP-02	CP
ACETONE	ug/L	< 10	10	EPA 8260B	30-SEP-02	CP
2-BUTANONE	ug/L	< 10	10	EPA 8260B	30-SEP-02	CP
CHLOROMETHANE	ug/L	< 10	10	EPA 8260B	30-SEP-02	CP
CIS-1,3-DICHLOROPROPENE	ug/L	< 5	5	EPA 8260B	30-SEP-02	CP
TRANS-1,3-DICHLOROPROPENE	ug/L	< 5	5	EPA 8260B	30-SEP-02	CP
BROMOFORM	ug/L	< 5	5	EPA 8260B	30-SEP-02	CP
DIBROMOCHLOROMETHANE	ug/L	< 5	5	EPA 8260B	30-SEP-02	CP
BROMODICHLOROMETHANE	ug/L	< 5	5	EPA 8260B	30-SEP-02	CP
CARBON TETRACHLORIDE	ug/L	< 5	5	EPA 8260B	30-SEP-02	CP

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Date Received: 17-SEP-02
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Client ID. OUTFALL 9-16-02

Lab ID L33672-3

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
BROMOMETHANE	ug/L	< 10	10	EPA 8260B	30-SEP-02	CP
ZINC-LOW LEVEL	mg/L	.00245	.0005	EPA 200.8	19-SEP-02	JMS

Comments. <none>

Submitted by
Exygen Research
Reviewed and Approved by:

Charles Simons
Laboratory Manager

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Date Reported: 02-OCT-02

Invoice Number 30474

Date Collected. 10-SEP-02

Client ID: TRIP BLANK

Lab ID: L33672-4

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
VOLATILE ANALYSIS						
VINYL CHLORIDE	ug/L	< 10	10	EPA 8260B	25-SEP-02	CP
DICHLOROMETHANE	ug/L	< 5	5	EPA 8260B	25-SEP-02	CP
1,1-DICHLOROETHENE	ug/L	< 5	5	EPA 8260B	25-SEP-02	CP
CIS-1,2-DICHLOROETHENE	ug/L	< 5	5	EPA 8260B	25-SEP-02	CP
TRANS-1,2-DICHLOROETHENE	ug/L	< 5	5	EPA 8260B	25-SEP-02	CP
CHLOROFORM	ug/L	< 5	5	EPA 8260B	25-SEP-02	CP
1,2-DICHLOROETHANE	ug/L	< 5	5	EPA 8260B	25-SEP-02	CP
1,1,1-TRICHLOROETHANE	ug/L	< 5	5	EPA 8260B	25-SEP-02	CP
1,1,2,2-TETRACHLOROETHANE	ug/L	< 5	5	EPA 8260B	25-SEP-02	CP
1,2-DICHLOROPROPANE	ug/L	< 5	5	EPA 8260B	25-SEP-02	CP
TRICHLOROETHENE	ug/L	< 5	5	EPA 8260B	25-SEP-02	CP
BENZENE	ug/L	< 5	5	EPA 8260B	25-SEP-02	CP
TETRACHLOROETHENE	ug/L	< 5	5	EPA 8260B	25-SEP-02	CP
TOLUENE	ug/L	< 5	5	EPA 8260B	25-SEP-02	CP
CHLOROBENZENE	ug/L	< 5	5	EPA 8260B	25-SEP-02	CP
ETHYLBENZENE	ug/L	< 5	5	EPA 8260B	25-SEP-02	CP
M,P-XYLENE	ug/L	< 5	5	EPA 8260B	25-SEP-02	CP
O-XYLENE	ug/L	< 5	5	EPA 8260B	25-SEP-02	CP
ACETONE	ug/L	< 10	10	EPA 8260B	25-SEP-02	CP
2-BUTANONE	ug/L	< 10	10	EPA 8260B	25-SEP-02	CP
CHLOROMETHANE	ug/L	< 10	10	EPA 8260B	25-SEP-02	CP
CIS-1,3-DICHLOROPROPENE	ug/L	< 5	5	EPA 8260B	25-SEP-02	CP
TRANS-1,3-DICHLOROPROPENE	ug/L	< 5	5	EPA 8260B	25-SEP-02	CP
BROMOFORM	ug/L	< 5	5	EPA 8260B	25-SEP-02	CP
DIBROMOCHLOROMETHANE	ug/L	< 5	5	EPA 8260B	25-SEP-02	CP
BROMODICHLOROMETHANE	ug/L	< 5	5	EPA 8260B	25-SEP-02	CP
CARBON TETRACHLORIDE	ug/L	< 5	5	EPA 8260B	25-SEP-02	CP
BROMOMETHANE	ug/L	< 10	10	EPA 8260B	25-SEP-02	CP

Comments: <none>

Submitted by
Exygen Research
Reviewed and Approved by:

Charles Simons
Laboratory Manager

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Analytical Report

RUETGERS ORGANICS CORPORATION/EHS DEPT.
201 STRUBLE ROAD
STATE COLLEGE, PA 16801
Account Number: 155

Contact: RAINER DOMALSKI

Date Received: 16-Sep-02
Date Reported: 2-Oct-02

Invoice Number: 30474

Date Collected: 16-Sep-02

Client ID: AGAC1-2-9-16-02

Lab ID: L33672-5

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
VAPOR PHASE VOC						
DICHLORODIFLUOROMETHANE	ppbv	< 2	2	TO14	30-Sep-02	CP
CHLOROETHANE	ppbv	< 2	2	TO14	30-Sep-02	CP
TRICHLOROFLUOROMETHANE	ppbv	< 2	2	TO14	30-Sep-02	CP
1,1-DICHLOROETHENE	ppbv	< 1	1	TO14	30-Sep-02	CP
DICHLOROMETHANE	ppbv	< 1	1	TO14	30-Sep-02	CP
TRANS-1,2-DICHLOROETHENE	ppbv	< 1	1	TO14	30-Sep-02	CP
1,1-DICHLOROETHANE	ppbv	< 1	1	TO14	30-Sep-02	CP
2,2-DICHLOROPROPANE	ppbv	< 1	1	TO14	30-Sep-02	CP
CIS-1,2-DICHLOROETHENE	ppbv	< 1	1	TO14	30-Sep-02	CP
CHLOROFORM	Ppbv	< 1	1	TO14	30-Sep-02	CP
BROMOCHLOROMETHANE	Ppbv	< 1	1	TO14	30-Sep-02	CP
1,1,1-TRICHLOROETHANE	ppbv	< 1	1	TO14	30-Sep-02	CP
1,1-DICHLOROPROPENE	ppbv	< 1	1	TO14	30-Sep-02	CP
CARBON TETRACHLORIDE	ppbv	< 1	1	TO14	30-Sep-02	CP
BENZENE	ppbv	< 1	1	TO14	30-Sep-02	CP
1,2-DICHLOROETHANE	ppbv	< 1	1	TO14	30-Sep-02	CP
TRICHLOROETHENE	ppbv	< 1	1	TO14	30-Sep-02	CP
1,2-DICHLOROPROPANE	ppbv	< 1	1	TO14	30-Sep-02	CP
BROMODICHLOROMETHANE	ppbv	< 1	1	TO14	30-Sep-02	CP
DIBROMOMETHANE	ppbv	< 1	1	TO14	30-Sep-02	CP
CIS-1,3-DICHLOROPROPENE	ppbv	< 1	1	TO14	30-Sep-02	CP
TOLUENE	ppbv	< 1	1	TO14	30-Sep-02	CP
TRANS-1,3-DICHLOROPROPENE	ppbv	< 1	1	TO14	30-Sep-02	CP
1,1,2-TRICHLOROETHANE	ppbv	< 1	1	TO14	30-Sep-02	CP
TETRACHLOROETHENE	ppbv	< 1	1	TO14	30-Sep-02	CP
1,3-DICHLOROPROPANE	ppbv	< 1	1	TO14	30-Sep-02	CP
DIBROMOCHLOROMETHANE	ppbv	< 1	1	TO14	30-Sep-02	CP
1,2-DIBROMOMETHANE	ppbv	< 1	1	TO14	30-Sep-02	CP
CHLOROBENZENE	ppbv	< 1	1	TO14	30-Sep-02	CP
1,1,1,2-TETRACHLOROETHANE	ppbv	< 1	1	TO14	30-Sep-02	CP
ETHYL BENZENE	ppbv	< 1	1	TO14	30-Sep-02	CP
M,P-XYLENE	ppbv	< 1	1	TO14	30-Sep-02	CP
O-XYLENE	ppbv	< 1	1	TO14	30-Sep-02	CP
STYRENE	ppbv	< 1	1	TO14	30-Sep-02	CP
BROMOFORM	ppbv	< 1	1	TO14	30-Sep-02	CP
ISOPROPYLBENZENE	ppbv	< 1	1	TO14	30-Sep-02	CP
1,1,2,2-TETRACHLOROETHANE	ppbv	< 1	1	TO14	30-Sep-02	CP
BROMOBENZENE	ppbv	< 1	1	TO14	30-Sep-02	CP
1,2,3-TRICHLOROPROPANE	ppbv	< 1	1	TO14	30-Sep-02	CP

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Analytical Report

RUETGERS ORGANICS CORPORATION/EHS DEPT.
201 STRUBLE ROAD
STATE COLLEGE, PA 16801
Account Number: 155

Contact: RALPH PEARCE

Date Received: 16-Sep-02
Date Reported: 2-Oct-02

Invoice Number: 30474

Date Collected: 16-Sep-02

Client ID: AGAC1-2-9-16-02

Lab ID: L33672-5

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
N-PROPYLBENZENE	ppbv	< 1	1	TO14	30-Sep-02	CP
2-CHLOROTOLUENE	ppbv	< 1	1	TO14	30-Sep-02	CP
1,3,5-TRIMETHYLBENZENE	ppbv	< 1	1	TO14	30-Sep-02	CP
4-CHLOROTOLUENE	ppbv	< 1	1	TO14	30-Sep-02	CP
TERT-BUTYLBENZENE	ppbv	< 1	1	TO14	30-Sep-02	CP
1,3,4-TRIMETHYLBENZENE	ppbv	< 1	1	TO14	30-Sep-02	CP
SEC-BUTYLBENZENE	ppbv	< 1	1	TO14	30-Sep-02	CP
ISOPROPYLBENZENE	ppbv	< 1	1	TO14	30-Sep-02	CP
1,3-DICHLOROBENZENE	ppbv	< 1	1	TO14	30-Sep-02	CP
1,4-DICHLOROBENZENE	ppbv	< 1	1	TO14	30-Sep-02	CP
N-BUTYLBENZENE	ppbv	< 1	1	TO14	30-Sep-02	CP
1,2-DICHLOROBENZENE	ppbv	< 1	1	TO14	30-Sep-02	CP
VINYL CHLORIDE	ppbv	< 2	2	TO14	30-Sep-02	CP

Submitted by
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Reviewed and Approved by:

Charles Simons
Laboratory Supervisor

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Client ID: AGAC1-2-9-16-02

Lab ID: L33672-5

Based upon an NBS Mass Spectral Library Search, the following additional non-target TO14 compounds were identified:

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
VAPOR PHASE VOC						
2-ETHYLTOLUENE	ppbv	< 1	1	TO14	30-Sep-02	CP
2-METHYLHEXANE	ppbv	< 1	1	TO14	30-Sep-02	CP
3-METHYLHEXANE	ppbv	< 1	1	TO14	30-Sep-02	CP
4-METHYL-2-PENTANONE	ppbv	< 1	1	TO14	30-Sep-02	CP
4-METHYL-M-XYLENE	ppbv	< 1	1	TO14	30-Sep-02	CP
ACETONE	ppbv	< 1	1	TO14	30-Sep-02	CP
DIMETHYL NONANE	ppbv	< 1	1	TO14	30-Sep-02	CP
DIMETHYLDECANE	ppbv	< 1	1	TO14	30-Sep-02	CP
DIMETHYLUNDECANE	ppbv	< 1	1	TO14	30-Sep-02	CP
HEXANE	ppbv	< 1	1	TO14	30-Sep-02	CP
TETRAHYDROFURAN	ppbv	< 1	1	TO14	30-Sep-02	CP
TRICHLOROTRIFLUOROETHANE	ppbv	< 1	1	TO14	30-Sep-02	CP
TRIDECANE	ppbv	< 1	1	TO14	30-Sep-02	CP
TRIMETHYLDECANE	ppbv	< 1	1	TO14	30-Sep-02	CP
TRIMETHYLHEXANE	ppbv	< 1	1	TO14	30-Sep-02	CP
TRIMETHYLOCTANE	ppbv	< 1	1	TO14	30-Sep-02	CP
UNDECANE	ppbv	< 1	1	TO14	30-Sep-02	CP

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201 STRUBLE ROAD
STATE COLLEGE, PA 16801
Account Number: 155

Contact: RAINER DOMALSKI

Date Received: 16-Sep-02
Date Reported: 2-Oct-02

Invoice Number: 30474

Date Collected: 16-Sep-02

Client ID: AGACF-2-9-16-02

Lab ID: L33672-6

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
VAPOR PHASE VOC						
DICHLORODIFLUOROMETHANE	ppbv	< 2	2	TO14	30-Sep-02	CP
CHLOROETHANE	ppbv	< 2	2	TO14	30-Sep-02	CP
TRICHLOROFLUOROMETHANE	ppbv	< 2	2	TO14	30-Sep-02	CP
1,1-DICHLOROETHENE	ppbv	< 1	1	TO14	30-Sep-02	CP
DICHLOROMETHANE	ppbv	< 1	1	TO14	30-Sep-02	CP
TRANS-1,2-DICHLOROETHENE	ppbv	< 1	1	TO14	30-Sep-02	CP
1,1-DICHLOROETHANE	ppbv	< 1	1	TO14	30-Sep-02	CP
2,2-DICHLOROPROPANE	ppbv	< 1	1	TO14	30-Sep-02	CP
CIS-1,2-DICHLOROETHENE	ppbv	< 1	1	TO14	30-Sep-02	CP
CHLOROFORM	Ppbv	< 1	1	TO14	30-Sep-02	CP
BROMOCHLOROMETHANE	Ppbv	< 1	1	TO14	30-Sep-02	CP
1,1,1-TRICHLOROETHANE	ppbv	< 1	1	TO14	30-Sep-02	CP
1,1-DICHLOROPROPENE	ppbv	< 1	1	TO14	30-Sep-02	CP
CARBON TETRACHLORIDE	ppbv	< 1	1	TO14	30-Sep-02	CP
BENZENE	ppbv	< 1	1	TO14	30-Sep-02	CP
1,2-DICHLOROETHANE	ppbv	< 1	1	TO14	30-Sep-02	CP
TRICHLOROETHENE	ppbv	< 1	1	TO14	30-Sep-02	CP
1,2-DICHLOROPROPANE	ppbv	< 1	1	TO14	30-Sep-02	CP
BROMODICHLOROMETHANE	ppbv	< 1	1	TO14	30-Sep-02	CP
DIBROMOMETHANE	ppbv	< 1	1	TO14	30-Sep-02	CP
CIS-1,3-DICHLOROPROPENE	ppbv	< 1	1	TO14	30-Sep-02	CP
TOLUENE	ppbv	< 1	1	TO14	30-Sep-02	CP
TRANS-1,3-DICHLOROPROPENE	ppbv	< 1	1	TO14	30-Sep-02	CP
1,1,2-TRICHLOROETHANE	ppbv	< 1	1	TO14	30-Sep-02	CP
TETRACHLOROETHENE	ppbv	< 1	1	TO14	30-Sep-02	CP
1,3-DICHLOROPROPANE	ppbv	< 1	1	TO14	30-Sep-02	CP
DIBROMOCHLOROMETHANE	ppbv	< 1	1	TO14	30-Sep-02	CP
1,2-DIBROMOMETHANE	ppbv	< 1	1	TO14	30-Sep-02	CP
CHLOROBENZENE	ppbv	< 1	1	TO14	30-Sep-02	CP
1,1,1,2-TETRACHLOROETHANE	ppbv	< 1	1	TO14	30-Sep-02	CP
ETHYL BENZENE	ppbv	< 1	1	TO14	30-Sep-02	CP
M,P-XYLENE	ppbv	< 1	1	TO14	30-Sep-02	CP
O-XYLENE	ppbv	< 1	1	TO14	30-Sep-02	CP
STYRENE	ppbv	< 1	1	TO14	30-Sep-02	CP
BROMOFORM	ppbv	< 1	1	TO14	30-Sep-02	CP
ISOPROPYLBENZENE	ppbv	< 1	1	TO14	30-Sep-02	CP
1,1,2,2-TETRACHLOROETHANE	ppbv	< 1	1	TO14	30-Sep-02	CP
BROMOBENZENE	ppbv	< 1	1	TO14	30-Sep-02	CP
1,2,3-TRICHLOROPROPANE	ppbv	< 1	1	TO14	30-Sep-02	CP

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Analytical Report

RUETGERS ORGANICS CORPORATION/EHS DEPT.
201 STRUBLE ROAD
STATE COLLEGE, PA 16801
Account Number: 155

Contact: RALPH PEARCE

Date Received: 16-Sep-02
Date Reported: 2-Oct-02

Invoice Number: 30474

Date Collected: 16-Sep-02

Client ID: AGACF-2-9-16-02

Lab ID: L33672-6

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
N-PROPYLBENZENE	ppbv	< 1	1	TO14	30-Sep-02	CP
2-CHLOROTOLUENE	ppbv	< 1	1	TO14	30-Sep-02	CP
1,3,5-TRIMETHYLBENZENE	ppbv	< 1	1	TO14	30-Sep-02	CP
4-CHLOROTOLUENE	ppbv	< 1	1	TO14	30-Sep-02	CP
TERT-BUTYLBENZENE	ppbv	< 1	1	TO14	30-Sep-02	CP
1,3,4-TRIMETHYLBENZENE	ppbv	< 1	1	TO14	30-Sep-02	CP
SEC-BUTYLBENZENE	ppbv	< 1	1	TO14	30-Sep-02	CP
ISOPROPYLBENZENE	ppbv	< 1	1	TO14	30-Sep-02	CP
1,3-DICHLOROBENZENE	ppbv	< 1	1	TO14	30-Sep-02	CP
1,4-DICHLOROBENZENE	ppbv	< 1	1	TO14	30-Sep-02	CP
N-BUTYLBENZENE	ppbv	< 1	1	TO14	30-Sep-02	CP
1,2-DICHLOROBENZENE	ppbv	< 1	1	TO14	30-Sep-02	CP
VINYL CHLORIDE	ppbv	< 2	2	TO14	30-Sep-02	CP

Submitted by
Exygen Research
Reviewed and Approved by:

Charles Simons
Laboratory Supervisor

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Date Collected: 16-Sep-02

Client ID: AGACF-2-9-16-02

Lab ID: L33672-6

Based upon an NBS Mass Spectral Library Search, the following additional non-target TO14 compounds were identified:

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
VAPOR PHASE VOC						
2-ETHYLTOLUENE	ppbv	< 1	1	TO14	30-Sep-02	CP
2-METHYLHEXANE	ppbv	< 1	1	TO14	30-Sep-02	CP
3-METHYLHEXANE	ppbv	< 1	1	TO14	30-Sep-02	CP
4-METHYL-2-PENTANONE	ppbv	< 1	1	TO14	30-Sep-02	CP
4-METHYL-M-XYLENE	ppbv	< 1	1	TO14	30-Sep-02	CP
ACETONE	ppbv	< 1	1	TO14	30-Sep-02	CP
DIMETHYL NONANE	ppbv	< 1	1	TO14	30-Sep-02	CP
DIMETHYLDECANE	ppbv	< 1	1	TO14	30-Sep-02	CP
DIMETHYLUNDECANE	ppbv	< 1	1	TO14	30-Sep-02	CP
HEXANE	ppbv	< 1	1	TO14	30-Sep-02	CP
TETRAHYDROFURAN	ppbv	< 1	1	TO14	30-Sep-02	CP
TRICHLOROTRIFLUOROETHANE	ppbv	< 1	1	TO14	30-Sep-02	CP
TRIDECANE	ppbv	< 1	1	TO14	30-Sep-02	CP
TRIMETHYLDECANE	ppbv	< 1	1	TO14	30-Sep-02	CP
TRIMETHYLHEXANE	ppbv	< 1	1	TO14	30-Sep-02	CP
TRIMETHYLOCTANE	ppbv	< 1	1	TO14	30-Sep-02	CP
UNDECANE	ppbv	< 1	1	TO14	30-Sep-02	CP

Submitted by
Exygen Research
Reviewed and Approved by:

Charles Simons
Laboratory Supervisor

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NARRATIVE

Exygen Research
Project: L33672

Sample Receipt:
Samples were received on September 17, 2002. The samples were received in two portable coolers. The temperatures of the coolers were 5.0°C and 5.7°C. The samples were stored at 4°C until time of analysis. Listed below are any deviations related to the analysis of samples.

EPA Method 200.8 (iron): The serial dilution for sample L33672-1 failed for the element iron. The serial dilution result for iron was 12% relative percent difference (RPD). The acceptable RPD for serial dilution is less than 10%.

There are no other deviations related to the analysis of these samples to report.

Attachment 4

Water/Air Sampling Results – October 1, 2002

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OCT 3 1 2002

RUTGERS ORGANICS CORPORATION/EHS DEPT.
201 STRUBLE ROAD
STATE COLLEGE , PA 16801
Account Number: 155

Contact: RAINER DOMALSKI

Date Received: 02-OCT-02
Date Reported. 30-OCT-02

Invoice Number 30622

Date Collected 01-OCT-02

Client ID INFLUENT 10-1-02

Lab ID: L33736-1

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
BOD-5 DAY	mg/L	54.5	1	EPA 405.1	02-OCT-02	AMB
IRON-LOW LEVEL	mg/L	7.1	.0005	EPA 200.8	03-OCT-02	JMS
PESTICIDE ANALYSIS						
KEPONE	ug/L	U .042	.042	SOP 6.2	11-OCT-02	CS
PHOTOMIREX	ug/L	U 006	.006	SOP 6.2	11-OCT-02	CS
MIREX	ug/L	547	.002	SOP 6.2	11-OCT-02	CS
PH	PH UNITS	8 03	0	EPA 150.1	10-OCT-02	CEB
TOTAL DISSOLVED SOLIDS	mg/L	508	1	EPA 160.1	08-OCT-02	SHZ
TOTAL SUSPENDED SOLIDS	mg/L	16.4	1	EPA 160.2	08-OCT-02	SHZ

Comments: <none>

Submitted by
Exygen Research
Reviewed and Approved by.

Charles Simons
Laboratory Manager

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Analytical Report

RUTGERS ORGANICS CORPORATION/EHS DEPT.
201 STRUBLE ROAD
STATE COLLEGE , PA 16801
Account Number. 155

Contact: RAINER DOMALSKI

Date Received: 02-OCT-02
Date Reported: 30-OCT-02

Invoice Number 30622

Date Collected. 01-OCT-02

Client ID: LGAC2-3 10-1-02

Lab ID: L33736-2

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
BOD-5 DAY	mg/L	2.5	1	EPA 405.1	02-OCT-02	AMB
IRON-LOW LEVEL	mg/L	.309	.0005	EPA 200.8	03-OCT-02	JMS
PESTICIDE ANALYSIS						
KEPONE	ug/L	U .042	.042	SOP 6.2	11-OCT-02	CS
PHOTOMIREX	ug/L	U 006	.006	SOP 6.2	11-OCT-02	CS
MIREX	ug/L	U .002	.002	SOP 6.2	11-OCT-02	CS
PH	PH UNITS	8.8	0	EPA 150.1	10-OCT-02	CEB
TOTAL DISSOLVED SOLIDS	mg/L	453	1	EPA 160.1	08-OCT-02	SHZ
TOTAL SUSPENDED SOLIDS	mg/L	2.1	1	EPA 160.2	08-OCT-02	SHZ
VOLATILE ANALYSIS						
VINYL CHLORIDE	ug/L	< 10	10	EPA 8260B	09-OCT-02	CP
DICHLOROMETHANE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
1,1-DICHLOROETHENE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
CIS-1,2-DICHLOROETHENE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
TRANS-1,2-DICHLOROETHENE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
CHLOROFORM	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
1,2-DICHLOROETHANE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
1,1,1-TRICHLOROETHANE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
1,1,2,2-TETRACHLOROETHANE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
1,2-DICHLOROPROPANE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
TRICHLOROETHENE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
BENZENE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
TETRACHLOROETHENE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
TOLUENE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
CHLOROBENZENE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
ETHYLBENZENE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
M,P-XYLENE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
O-XYLENE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
ACETONE	ug/L	< 10	10	EPA 8260B	09-OCT-02	CP

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RUTGERS ORGANICS CORPORATION/EHS DEPT
201 STRUBLE ROAD
STATE COLLEGE , PA 16801
Account Number: 155

Contact: RAINER DOMALSKI

Date Received 02-OCT-02
Date Reported: 30-OCT-02

Invoice Number: 30622

Date Collected. 01-OCT-02

Client ID: LGAC2-3 10-1-02

Lab ID: L33736-2

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
2-BUTANONE	ug/L	< 10	10	EPA 8260B	09-OCT-02	CP
CHLOROMETHANE	ug/L	< 10	10	EPA 8260B	09-OCT-02	CP
CIS-1,3-DICHLOROPROPENE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
TRANS-1,3-DICHLOROPROPENE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
BROMOFORM	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
DIBROMOCHLOROMETHANE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
BROMODICHLOROMETHANE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
CARBON TETRACHLORIDE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
BROMOMETHANE	ug/L	< 10	10	EPA 8260B	09-OCT-02	CP

Comments: <none>

Submitted by
Exygen Research
Reviewed and Approved by:

Charles Simons
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RUTGERS ORGANICS CORPORATION/EHS DEPT.
201 STRUBLE ROAD
STATE COLLEGE , PA 16801
Account Number: 155

Contact: RAINER DOMALSKI

Date Received. 02-OCT-02
Date Reported 30-OCT-02

Invoice Number 30622

Date Collected: 01-OCT-02

Client ID. OUTFALL 10-1-02

Lab ID: L33736-3

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
BOD-5 DAY	mg/L	< 1	1	EPA 405.1	02-OCT-02	AMB
COD	mg/L	< 5	5	EPA 410.4	16-OCT-02	SHZ
IRON-LOW LEVEL	mg/L	.299	.0005	EPA 200.8	03-OCT-02	JMS
PESTICIDE ANALYSIS						
KEPONE	ug/L	U .042	.042	SOP 6.2	11-OCT-02	CS
PHOTOMIREX	ug/L	U .006	.006	SOP 6.2	11-OCT-02	CS
MIREX	ug/L	U .002	.002	SOP 6.2	11-OCT-02	CS
AMMONIA	mg/L	1.16	.2	EPA 350.3 MOD	11-OCT-02	CEB
OIL & GREASE	mg/L	< 5	5	EPA 413.1	09-OCT-02	SUB
PH	PH UNITS	9.09	0	EPA 150.1	10-OCT-02	CEB
SEMI-VOLATILE ANALYSIS						
ANTHRACENE	ug/L	< 10	10	EPA 8270C	04-OCT-02	CS
BENZO(A)ANTHRACENE	ug/L	< 10	10	EPA 8270C	04-OCT-02	CS
BENZO(K)FLUORANTHENE	ug/L	< 10	10	EPA 8270C	04-OCT-02	CS
3,4-BENZOFLUORANTHENE	ug/L	< 10	10	EPA 8270C	04-OCT-02	CS
BENZO(B)FLUORANTHENE	ug/L	< 10	10	EPA 8270C	04-OCT-02	CS
BENZO(G,H,I)PERYLENE	ug/L	< 10	10	EPA 8270C	04-OCT-02	CS
BENZO(A)PYRENE	ug/L	< 10	10	EPA 8270C	04-OCT-02	CS
CHRYSENE	ug/L	< 10	10	EPA 8270C	04-OCT-02	CS
DIBENZ(A,H)ANTHRACENE	ug/L	< 10	10	EPA 8270C	04-OCT-02	CS
FLUORENE	ug/L	< 10	10	EPA 8270C	04-OCT-02	CS
INDENO(1,2,3-CD)PYRENE	ug/L	< 10	10	EPA 8270C	04-OCT-02	CS
NAPHTHALENE	ug/L	< 10	10	EPA 8270C	04-OCT-02	CS
PHENANTHRENE	ug/L	< 10	10	EPA 8270C	04-OCT-02	CS
PYRENE	ug/L	< 10	10	EPA 8270C	04-OCT-02	CS
PHENOL	ug/L	< 10	10	EPA 8270C	04-OCT-02	CS
4-METHYLPHENOL	ug/L	< 10	10	EPA 8270C	04-OCT-02	CS
1,3-DICHLOROBENZENE	ug/L	< 10	10	EPA 8270C	04-OCT-02	CS

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STATE COLLEGE , PA 16801
Account Number: 155

Contact: RAINER DOMALSKI

Date Received 02-OCT-02
Date Reported. 30-OCT-02

Invoice Number· 30622

Date Collected: 01-OCT-02

Client ID: OUTFALL 10-1-02

Lab ID: L33736-3

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
1,4-DICHLOROBENZENE	ug/L	< 10	10	EPA 8270C	04-OCT-02	CS
1,2-DICHLOROBENZENE	ug/L	< 10	10	EPA 8270C	04-OCT-02	CS
DIMETHYL PHTHALATE	ug/L	< 10	10	EPA 8270C	04-OCT-02	CS
BUTYLBENZYL PHTHALATE	ug/L	< 10	10	EPA 8270C	04-OCT-02	CS
DI-N-BUTYL PHTHALATE	ug/L	< 10	10	EPA 8270C	04-OCT-02	CS
2-METHYLNAPHTHALENE	ug/L	< 10	10	EPA 8270C	04-OCT-02	CS
3,4-DICHLORONITROBENZENE	ug/L	< 10	10	EPA 8270C	04-OCT-02	CS
DIPHENYL SULFONE	ug/L	< 10	10	EPA 8270C	04-OCT-02	CS
TOTAL DISSOLVED SOLIDS	mg/L	382	1	EPA 160.1	08-OCT-02	SHZ
TOTAL SUSPENDED SOLIDS	mg/L	1	1	EPA 160.2	08-OCT-02	SHZ
VOLATILE ANALYSIS						
VINYL CHLORIDE	ug/L	< 10	10	EPA 8260B	09-OCT-02	CP
DICHLOROMETHANE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
1,1-DICHLOROETHENE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
CIS-1,2-DICHLOROETHENE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
TRANS-1,2-DICHLOROETHENE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
CHLOROFORM	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
1,2-DICHLOROETHANE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
1,1,1-TRICHLOROETHANE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
1,1,2,2-TETRACHLOROETHANE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
1,2-DICHLOROPROPANE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
TRICHLOROETHENE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
BENZENE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
TETRACHLOROETHENE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
TOLUENE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
CHLOROBENZENE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
ETHYLBENZENE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
M,P-XYLENE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
O-XYLENE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
ACETONE	ug/L	< 10	10	EPA 8260B	09-OCT-02	CP
2-BUTANONE	ug/L	< 10	10	EPA 8260B	09-OCT-02	CP
CHLOROMETHANE	ug/L	< 10	10	EPA 8260B	09-OCT-02	CP
CIS-1,3-DICHLOROPROPENE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP

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RUTGERS ORGANICS CORPORATION/EHS DEPT
201 STRUBLE ROAD
STATE COLLEGE , PA 16801
Account Number: 155

Contact: RAINER DOMALSKI

Date Received 02-OCT-02
Date Reported 30-OCT-02

Invoice Number: 30622

Date Collected 01-OCT-02

Client ID: OUTFALL 10-1-02

Lab ID: L33736-3

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
TRANS-1,3-DICHLOROPROPENE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
BROMOFORM	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
DIBROMOCHLOROMETHANE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
BROMODICHLOROMETHANE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
CARBON TETRACHLORIDE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
BROMOMETHANE	ug/L	< 10	10	EPA 8260B	09-OCT-02	CP

Comments <none>

Submitted by
Exygen Research
Reviewed and Approved by

Charles Simons
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STATE COLLEGE , PA 16801
Account Number: 155

Contact: RAINER DOMALSKI

Date Received 02-OCT-02
Date Reported: 30-OCT-02

Invoice Number 30622

Date Collected. 27-SEP-02

Client ID: TRIP BLANK

Lab ID: L33736-4

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
VOLATILE ANALYSIS						
VINYL CHLORIDE	ug/L	< 10	10	EPA 8260B	09-OCT-02	CP
DICHLOROMETHANE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
1,1-DICHLOROETHENE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
CIS-1,2-DICHLOROETHENE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
TRANS-1,2-DICHLOROETHENE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
CHLOROFORM	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
1,2-DICHLOROETHANE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
1,1,1-TRICHLOROETHANE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
1,1,2,2-TETRACHLOROETHANE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
1,2-DICHLOROPROPANE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
TRICHLOROETHENE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
BENZENE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
TETRACHLOROETHENE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
TOLUENE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
CHLOROBENZENE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
ETHYLBENZENE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
M,P-XYLENE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
O-XYLENE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
ACETONE	ug/L	< 10	10	EPA 8260B	09-OCT-02	CP
2-BUTANONE	ug/L	< 10	10	EPA 8260B	09-OCT-02	CP
CHLOROMETHANE	ug/L	< 10	10	EPA 8260B	09-OCT-02	CP
CIS-1,3-DICHLOROPROPENE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
TRANS-1,3-DICHLOROPROPENE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
BROMOFORM	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
DIBROMOCHLOROMETHANE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
BROMODICHLOROMETHANE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
CARBON TETRACHLORIDE	ug/L	< 5	5	EPA 8260B	09-OCT-02	CP
BROMOMETHANE	ug/L	< 10	10	EPA 8260B	09-OCT-02	CP

Comments: <none>

Submitted by
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STATE COLLEGE, PA 16801
Account Number: 155

Contact: RAINER DOMALSKI

Date Received: 2-Oct-02
Date Reported: 30-Oct-02

Invoice Number: 30622

Date Collected: 1-Oct-02

Client ID: AGAC1-2 10-1-02

Lab ID: L33736-5

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
VAPOR PHASE VOC						
DICHLORODIFLUOROMETHANE	ppbv	< 2	2	TO14	28-Oct-02	CP
CHLOROETHANE	ppbv	< 2	2	TO14	28-Oct-02	CP
TRICHLOROFLUOROMETHANE	ppbv	< 2	2	TO14	28-Oct-02	CP
1,1-DICHLOROETHENE	ppbv	< 1	1	TO14	28-Oct-02	CP
DICHLOROMETHANE	ppbv	< 1	1	TO14	28-Oct-02	CP
TRANS-1,2-DICHLOROETHENE	ppbv	< 1	1	TO14	28-Oct-02	CP
1,1-DICHLOROETHANE	ppbv	< 1	1	TO14	28-Oct-02	CP
2,2-DICHLOROPROPANE	ppbv	< 1	1	TO14	28-Oct-02	CP
CIS-1,2-DICHLOROETHENE	ppbv	< 1	1	TO14	28-Oct-02	CP
CHLOROFORM	Ppbv	< 1	1	TO14	28-Oct-02	CP
BROMOCHLOROMETHANE	Ppbv	< 1	1	TO14	28-Oct-02	CP
1,1,1-TRICHLOROETHANE	ppbv	< 1	1	TO14	28-Oct-02	CP
1,1-DICHLOROPROPENE	ppbv	< 1	1	TO14	28-Oct-02	CP
CARBON TETRACHLORIDE	ppbv	< 1	1	TO14	28-Oct-02	CP
BENZENE	ppbv	< 1	1	TO14	28-Oct-02	CP
1,2-DICHLOROETHANE	ppbv	< 1	1	TO14	28-Oct-02	CP
TRICHLOROETHENE	ppbv	< 1	1	TO14	28-Oct-02	CP
1,2-DICHLOROPROPANE	ppbv	< 1	1	TO14	28-Oct-02	CP
BROMODICHLOROMETHANE	ppbv	< 1	1	TO14	28-Oct-02	CP
DIBROMOMETHANE	ppbv	< 1	1	TO14	28-Oct-02	CP
CIS-1,3-DICHLOROPROPENE	ppbv	< 1	1	TO14	28-Oct-02	CP
TOLUENE	ppbv	< 1	1	TO14	28-Oct-02	CP
TRANS-1,3-DICHLOROPROPENE	ppbv	< 1	1	TO14	28-Oct-02	CP
1,1,2-TRICHLOROETHANE	ppbv	< 1	1	TO14	28-Oct-02	CP
TETRACHLOROETHENE	ppbv	< 1	1	TO14	28-Oct-02	CP
1,3-DICHLOROPROPANE	ppbv	< 1	1	TO14	28-Oct-02	CP
DIBROMOCHLOROMETHANE	ppbv	< 1	1	TO14	28-Oct-02	CP
1,2-DIBROMOMETHANE	ppbv	< 1	1	TO14	28-Oct-02	CP
CHLOROBENZENE	ppbv	< 1	1	TO14	28-Oct-02	CP
1,1,1,2-TETRACHLOROETHANE	ppbv	< 1	1	TO14	28-Oct-02	CP
ETHYL BENZENE	ppbv	< 1	1	TO14	28-Oct-02	CP
M,P-XYLENE	ppbv	< 1	1	TO14	28-Oct-02	CP
O-XYLENE	ppbv	< 1	1	TO14	28-Oct-02	CP
STYRENE	ppbv	< 1	1	TO14	28-Oct-02	CP
BROMOFORM	ppbv	< 1	1	TO14	28-Oct-02	CP
ISOPROPYLBENZENE	ppbv	< 1	1	TO14	28-Oct-02	CP
1,1,2,2-TETRACHLOROETHANE	ppbv	< 1	1	TO14	28-Oct-02	CP
BROMOBENZENE	ppbv	< 1	1	TO14	28-Oct-02	CP
1,2,3-TRICHLOROPROPANE	ppbv	< 1	1	TO14	28-Oct-02	CP

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RUETGERS ORGANICS CORPORATION/EHS DEPT.
201 STRUBLE ROAD
STATE COLLEGE, PA 16801
Account Number: 155

Contact: RALPH PEARCE

Date Received: 2-Oct-02
Date Reported: 30-Oct-02

Invoice Number: 30622

Date Collected: 1-Oct-02

Client ID: AGAC1-2 10-1-02

Lab ID: L33736-5

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
N-PROPYLBENZENE	ppbv	< 1	1	TO14	28-Oct-02	CP
2-CHLOROTOLUENE	ppbv	< 1	1	TO14	28-Oct-02	CP
1,3,5-TRIMETHYLBENZENE	ppbv	< 1	1	TO14	28-Oct-02	CP
4-CHLOROTOLUENE	ppbv	< 1	1	TO14	28-Oct-02	CP
TERT-BUTYLBENZENE	ppbv	< 1	1	TO14	28-Oct-02	CP
1,3,4-TRIMETHYLBENZENE	ppbv	< 1	1	TO14	28-Oct-02	CP
SEC-BUTYLBENZENE	ppbv	< 1	1	TO14	28-Oct-02	CP
ISOPROPYLBENZENE	ppbv	< 1	1	TO14	28-Oct-02	CP
1,3-DICHLOROBENZENE	ppbv	< 1	1	TO14	28-Oct-02	CP
1,4-DICHLOROBENZENE	ppbv	< 1	1	TO14	28-Oct-02	CP
N-BUTYLBENZENE	ppbv	< 1	1	TO14	28-Oct-02	CP
1,2-DICHLOROBENZENE	ppbv	< 1	1	TO14	28-Oct-02	CP
VINYL CHLORIDE	ppbv	< 2	2	TO14	28-Oct-02	CP

Submitted by
Exygen Research
Reviewed and Approved by:

Charles Simons
Laboratory Supervisor

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Contact: RALPH PEARCE

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Invoice Number: 30622

Date Collected: 1-Oct-02

Client ID: AGAC1-2 10-1-02

Lab ID: L33736-5

Based upon an NBS Mass Spectral Library Search, the following additional non-target TO14 compounds were identified:

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
VAPOR PHASE VOC						
2-ETHYLTOLUENE	ppbv	< 1	1	TO14	28-Oct-02	CP
2-METHYLHEXANE	ppbv	< 1	1	TO14	28-Oct-02	CP
3-METHYLHEXANE	ppbv	< 1	1	TO14	28-Oct-02	CP
4-METHYL-2-PENTANONE	ppbv	< 1	1	TO14	28-Oct-02	CP
4-METHYL-M-XYLENE	ppbv	< 1	1	TO14	28-Oct-02	CP
ACETONE	ppbv	< 1	1	TO14	28-Oct-02	CP
DIMETHYL NONANE	ppbv	< 1	1	TO14	28-Oct-02	CP
DIMETHYLDECANE	ppbv	< 1	1	TO14	28-Oct-02	CP
DIMETHYLUNDECANE	ppbv	< 1	1	TO14	28-Oct-02	CP
HEXANE	ppbv	< 1	1	TO14	28-Oct-02	CP
TETRAHYDROFURAN	ppbv	< 1	1	TO14	28-Oct-02	CP
TRICHLOROTRIFLUOROETHANE	ppbv	< 1	1	TO14	28-Oct-02	CP
TRIDECANE	ppbv	< 1	1	TO14	28-Oct-02	CP
TRIMETHYLDECANE	ppbv	< 1	1	TO14	28-Oct-02	CP
TRIMETHYLHEXANE	ppbv	< 1	1	TO14	28-Oct-02	CP
TRIMETHYLOCTANE	ppbv	< 1	1	TO14	28-Oct-02	CP
UNDECANE	ppbv	< 1	1	TO14	28-Oct-02	CP

Submitted by
Exygen Research
Reviewed and Approved by:

Charles Simons
Laboratory Supervisor

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NARRATIVE

Exygen Research
Project: L33736

Sample Receipt:
Five samples and one trip blank were received on October 2, 2002. The samples were received in two sample coolers. The temperatures of the sample coolers were 5.0°C and 5.5°C upon receipt. Listed below are any deviations related to the analysis of these samples.

There were no problems to report for this sample delivery group.

Attachment 5

Water/Air Sampling Results – October 15, 2002

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RUTGERS ORGANICS CORPORATION/EHS DEPT.
201 STRUBLE ROAD
STATE COLLEGE , PA 16801
Account Number. 155

Contact: RAINER DOMALSKI

Date Received 16-OCT-02
Date Reported. 04-NOV-02

Invoice Number. 30622

Date Collected 15-OCT-02

Client ID: INFLUENT 10-15-02

Lab ID. L33795-1

NOV 5 2002

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
BOD-5 DAY	mg/L	39 6	1	EPA 405.1	17-OCT-02	CEB
IRON-LOW LEVEL	mg/L	22 9	0005	EPA 200.8	18-OCT-02	JMS
PESTICIDE ANALYSIS						
KEPONE	ug/L	U 042	.042	SOP 6.2	22-OCT-02	CS
PHOTOMIREX	ug/L	U 006	.006	SOP 6.2	22-OCT-02	CS
MIREX	ug/L	U 002	002	SOP 6.2	22-OCT-02	CS
PH	PH UNITS	7.75	0	EPA 150.1	28-OCT-02	CEB
TOTAL DISSOLVED SOLIDS	mg/L	805	1	EPA 160.1	21-OCT-02	SHZ
TOTAL SUSPENDED SOLIDS	mg/L	28.1	1	EPA 160.2	21-OCT-02	SHZ

Comments <none>

Submitted by
Exygen Research
Reviewed and Approved by:

Charles Simons
Laboratory Manager

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State College, PA 16801, USA
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Analytical Report

RUTGERS ORGANICS CORPORATION/EHS DEPT.
201 STRUBLE ROAD
STATE COLLEGE , PA 16801
Account Number: 155

Contact: RAINER DOMALSKI

Date Received: 16-OCT-02
Date Reported: 04-NOV-02

Invoice Number 30622

Date Collected: 15-OCT-02

Client ID: LGAC2-3 10-15-02

Lab ID: L33795-2

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
BOD-5 DAY	mg/L	< 1	1	EPA 405 1	17-OCT-02	CEB
IRON-LOW LEVEL	mg/L	.761	.0005	EPA 200.8	18-OCT-02	JMS
PESTICIDE ANALYSIS						
KEPONE	ug/L	U .042	.042	SOP 6.2	22-OCT-02	CS
PHOTOMIREX	ug/L	U .006	.006	SOP 6.2	22-OCT-02	CS
MIREX	ug/L	U .002	.002	SOP 6.2	22-OCT-02	CS
PH	PH UNITS	8.46	0	EPA 150 1	28-OCT-02	CEB
TOTAL DISSOLVED SOLIDS	mg/L	749	1	EPA 160.1	21-OCT-02	SHZ
TOTAL SUSPENDED SOLIDS	mg/L	1	1	EPA 160.2	21-OCT-02	SHZ
VOLATILE ANALYSIS						
VINYL CHLORIDE	ug/L	< 10	10	EPA 8260B	24-OCT-02	CP
DICHLOROMETHANE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
1,1-DICHLOROETHENE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
CIS-1,2-DICHLOROETHENE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
TRANS-1,2-DICHLOROETHENE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
CHLOROFORM	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
1,2-DICHLOROETHANE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
1,1,1-TRICHLOROETHANE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
1,1,2,2-TETRACHLOROETHANE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
1,2-DICHLOROPROPANE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
TRICHLOROETHENE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
BENZENE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
TETRACHLOROETHENE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
TOLUENE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
CHLOROBENZENE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
ETHYLBENZENE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
M,P-XYLENE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
O-XYLENE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
ACETONE	ug/L	< 10	10	EPA 8260B	24-OCT-02	CP

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Lab ID: L33795-2

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
2-BUTANONE	ug/L	< 10	10	EPA 8260B	24-OCT-02	CP
CHLOROMETHANE	ug/L	< 10	10	EPA 8260B	24-OCT-02	CP
CIS-1,3-DICHLOROPROPENE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
TRANS-1,3-DICHLOROPROPENE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
BROMOFORM	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
DIBROMOCHLOROMETHANE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
BROMODICHLOROMETHANE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
CARBON TETRACHLORIDE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
BROMOMETHANE	ug/L	< 10	10	EPA 8260B	24-OCT-02	CP

Comments: <none>

Submitted by
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PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
SILVER-LOW LEVEL	mg/L	< .0003	.0003	EPA 200.8	18-OCT-02	JMS
ALUMINUM-LOW LEVEL	mg/L	.0563	.0005	EPA 200.8	18-OCT-02	JMS
ARSENIC-LOW LEVEL	mg/L	.0161	.0003	EPA 6020	18-OCT-02	JMS
BERYLLIUM-LOW LEVEL	mg/L	< .0004	.0004	EPA 200 8	18-OCT-02	JMS
BOD-5 DAY	mg/L	< 1	1	EPA 405.1	17-OCT-02	CEB
CADMIUM-LOW LEVEL	mg/L	< .0003	0003	EPA 200.8	18-OCT-02	JMS
CYANIDE-FREE	mg/L	< .005	.005	EPA 335.2	01-NOV-02	SHZ-DEH
COD	mg/L	9.65	5	EPA 410.4	16-OCT-02	SHZ
CHROMIUM-LOW LEVEL	mg/L	000617	.0006	EPA 200.8	18-OCT-02	JMS
COPPER-LOW LEVEL	mg/L	00327	.001	EPA 200.8	18-OCT-02	JMS
IRON-LOW LEVEL	mg/L	.944	.0005	EPA 200 8	18-OCT-02	JMS
MERCURY	mg/L	< .0002	.0002	EPA 245 1	26-OCT-02	SUB
PESTICIDE ANALYSIS						
KEPONE	ug/L	U .042	.042	SOP 6.2	22-OCT-02	CS
PHOTOMIREX	ug/L	U .006	.006	SOP 6.2	22-OCT-02	CS
MIREX	ug/L	U .002	.002	SOP 6.2	22-OCT-02	CS
AMMONIA	mg/L	2.36	.2	EPA 350.3 MOD	28-OCT-02	CEB
NICKEL-LOW LEVEL	mg/L	00546	.0006	EPA 200.8	18-OCT-02	JMS
OIL & GREASE	mg/L	< 9.8	9.8	EPA 413.1	29-OCT-02	SUB

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LEAD-LOW LEVEL	mg/L	< .0003	.0003	EPA 200.8	18-OCT-02	JMS
PESTICIDE/PCB ANALYSIS						
METHOXYCHLOR	ug/L	< .002	.002	EPA 608	22-OCT-02	CAK
PH	PH UNITS	8.52	0	EPA 150.1	28-OCT-02	CEB
ANTIMONY-LOW LEVEL	mg/L	.00272	.0004	EPA 200.8	18-OCT-02	JMS
SEMI-VOLATILE ANALYSIS						
ANTHRACENE	ug/L	< 10	10	EPA 8270C	21-OCT-02	CS
BENZO(A)ANTHRACENE	ug/L	< 10	10	EPA 8270C	21-OCT-02	CS
BENZO(K)FLUORANTHENE	ug/L	< 10	10	EPA 8270C	21-OCT-02	CS
3,4-BENZOFLUORANTHENE	ug/L	< 10	10	EPA 8270C	21-OCT-02	CS
BENZO(B)FLUORANTHENE	ug/L	< 10	10	EPA 8270C	21-OCT-02	CS
BENZO(G,H,I)PERYLENE	ug/L	< 10	10	EPA 8270C	21-OCT-02	CS
BENZO(A)PYRENE	ug/L	< 10	10	EPA 8270C	21-OCT-02	CS
CHRYSENE	ug/L	< 10	10	EPA 8270C	21-OCT-02	CS
DIBENZ(A,H)ANTHRACENE	ug/L	< 10	10	EPA 8270C	21-OCT-02	CS
FLUORENE	ug/L	< 10	10	EPA 8270C	21-OCT-02	CS
INDENO(1,2,3-CD)PYRENE	ug/L	< 10	10	EPA 8270C	21-OCT-02	CS
NAPHTHALENE	ug/L	< 10	10	EPA 8270C	21-OCT-02	CS
PHENANTHRENE	ug/L	< 10	10	EPA 8270C	21-OCT-02	CS
PYRENE	ug/L	< 10	10	EPA 8270C	21-OCT-02	CS
PHENOL	ug/L	< 10	10	EPA 8270C	21-OCT-02	CS
4-METHYLPHENOL	ug/L	< 10	10	EPA 8270C	21-OCT-02	CS
1,3-DICHLOROBENZENE	ug/L	< 10	10	EPA 8270C	21-OCT-02	CS
1,4-DICHLOROBENZENE	ug/L	< 10	10	EPA 8270C	21-OCT-02	CS
1,2-DICHLOROBENZENE	ug/L	< 10	10	EPA 8270C	21-OCT-02	CS
DIMETHYL PHTHALATE	ug/L	< 10	10	EPA 8270C	21-OCT-02	CS
BUTYLBENZYL PHTHALATE	ug/L	< 10	10	EPA 8270C	21-OCT-02	CS
DI-N-BUTYL PHTHALATE	ug/L	< 10	10	EPA 8270C	21-OCT-02	CS
2-METHYLNAPHTHALENE	ug/L	< 10	10	EPA 8270C	21-OCT-02	CS
3,4-DICHLORONITROBENZENE	ug/L	< 10	10	EPA 8270C	21-OCT-02	CS
DIPHENYL SULFONE	ug/L	< 10	10	EPA 8270C	21-OCT-02	CS

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TOTAL DISSOLVED SOLIDS	mg/L	683	1	EPA 160.1	21-OCT-02	SHZ
THALLIUM-LOW LEVEL	mg/L	< .0002	.0002	EPA 200 8	18-OCT-02	JMS
TOTAL ORGANIC CARBON	mg/L	< .5	5	EPA 415.1	31-OCT-02	CEB
TOTAL SUSPENDED SOLIDS	mg/L	1	1	EPA 160.2	21-OCT-02	SHZ
VOLATILE ANALYSIS						
VINYL CHLORIDE	ug/L	< 10	10	EPA 8260B	24-OCT-02	CP
DICHLOROMETHANE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
1,1-DICHLOROETHENE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
CIS-1,2-DICHLOROETHENE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
TRANS-1,2-DICHLOROETHENE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
CHLOROFORM	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
1,2-DICHLOROETHANE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
1,1,1-TRICHLOROETHANE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
1,1,2,2-TETRACHLOROETHANE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
1,2-DICHLOROPROPANE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
TRICHLOROETHENE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
BENZENE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
TETRACHLOROETHENE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
TOLUENE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
CHLOROBENZENE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
ETHYLBENZENE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
M,P-XYLENE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
O-XYLENE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
ACETONE	ug/L	< 10	10	EPA 8260B	24-OCT-02	CP
2-BUTANONE	ug/L	< 10	10	EPA 8260B	24-OCT-02	CP
CHLOROMETHANE	ug/L	< 10	10	EPA 8260B	24-OCT-02	CP
CIS-1,3-DICHLOROPROPENE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
TRANS-1,3-DICHLOROPROPENE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
BROMOFORM	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
DIBROMOCHLOROMETHANE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
BROMODICHLOROMETHANE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
CARBON TETRACHLORIDE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP

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Lab ID: L33795-3

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
BROMOMETHANE	ug/L	< 10	10	EPA 8260B	24-OCT-02	CP
ZINC-LOW LEVEL	mg/L	.00341	.0005	EPA 200.8	18-OCT-02	JMS

Comments: <none>

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Contact: RAINER DOMALSKI

Date Received 16-OCT-02
Date Reported 04-NOV-02

Invoice Number

Date Collected 27-SEP-02

Client ID TRIP BLANK

Lab ID· L33795-4

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
VOLATILE ANALYSIS						
VINYL CHLORIDE	ug/L	< 10	10	EPA 8260B	24-OCT-02	CP
DICHLOROMETHANE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
1,1-DICHLOROETHENE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
CIS-1,2-DICHLOROETHENE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
TRANS-1,2-DICHLOROETHENE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
CHLOROFORM	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
1,2-DICHLOROETHANE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
1,1,1-TRICHLOROETHANE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
1,1,2,2-TETRACHLOROETHANE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
1,2-DICHLOROPROPANE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
TRICHLOROETHENE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
BENZENE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
TETRACHLOROETHENE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
TOLUENE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
CHLOROBENZENE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
ETHYLBENZENE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
M,P-XYLENE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
O-XYLENE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
ACETONE	ug/L	< 10	10	EPA 8260B	24-OCT-02	CP
2-BUTANONE	ug/L	< 10	10	EPA 8260B	24-OCT-02	CP
CHLOROMETHANE	ug/L	< 10	10	EPA 8260B	24-OCT-02	CP
CIS-1,3-DICHLOROPROPENE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
TRANS-1,3-DICHLOROPROPENE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
BROMOFORM	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
DIBROMOCHLOROMETHANE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
BROMODICHLOROMETHANE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
CARBON TETRACHLORIDE	ug/L	< 5	5	EPA 8260B	24-OCT-02	CP
BROMOMETHANE	ug/L	< 10	10	EPA 8260B	24-OCT-02	CP

Comments <none>

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Contact: RAINER DOMALSKI

Date Received: 16-Oct-02
Date Reported: 31-Oct-02

Invoice Number: 30622

Date Collected: 15-Oct-02

Client ID: AGAC1-2-10-11-02

Lab ID: L33795-5

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
VAPOR PHASE VOC						
DICHLORODIFLUOROMETHANE	ppbv	< 2	2	TO14	28-Oct-02	CP
CHLOROETHANE	ppbv	< 2	2	TO14	28-Oct-02	CP
TRICHLOROFLUOROMETHANE	ppbv	< 2	2	TO14	28-Oct-02	CP
1,1-DICHLOROETHENE	ppbv	< 1	1	TO14	28-Oct-02	CP
DICHLOROMETHANE	ppbv	< 1	1	TO14	28-Oct-02	CP
TRANS-1,2-DICHLOROETHENE	ppbv	< 1	1	TO14	28-Oct-02	CP
1,1-DICHLOROETHANE	ppbv	< 1	1	TO14	28-Oct-02	CP
2,2-DICHLOROPROPANE	ppbv	< 1	1	TO14	28-Oct-02	CP
CIS-1,2-DICHLOROETHENE	ppbv	< 1	1	TO14	28-Oct-02	CP
CHLOROFORM	Ppbv	< 1	1	TO14	28-Oct-02	CP
BROMOCHLOROMETHANE	Ppbv	< 1	1	TO14	28-Oct-02	CP
1,1,1-TRICHLOROETHANE	ppbv	< 1	1	TO14	28-Oct-02	CP
1,1-DICHLOROPROPENE	ppbv	< 1	1	TO14	28-Oct-02	CP
CARBON TETRACHLORIDE	ppbv	< 1	1	TO14	28-Oct-02	CP
BENZENE	ppbv	< 1	1	TO14	28-Oct-02	CP
1,2-DICHLOROETHANE	ppbv	< 1	1	TO14	28-Oct-02	CP
TRICHLOROETHENE	ppbv	< 1	1	TO14	28-Oct-02	CP
1,2-DICHLOROPROPANE	ppbv	< 1	1	TO14	28-Oct-02	CP
BROMODICHLOROMETHANE	ppbv	< 1	1	TO14	28-Oct-02	CP
DIBROMOMETHANE	ppbv	< 1	1	TO14	28-Oct-02	CP
CIS-1,3-DICHLOROPROPENE	ppbv	< 1	1	TO14	28-Oct-02	CP
TOLUENE	ppbv	< 1	1	TO14	28-Oct-02	CP
TRANS-1,3-DICHLOROPROPENE	ppbv	< 1	1	TO14	28-Oct-02	CP
1,1,2-TRICHLOROETHANE	ppbv	< 1	1	TO14	28-Oct-02	CP
TETRACHLOROETHENE	ppbv	< 1	1	TO14	28-Oct-02	CP
1,3-DICHLOROPROPANE	ppbv	< 1	1	TO14	28-Oct-02	CP
DIBROMOCHLOROMETHANE	ppbv	< 1	1	TO14	28-Oct-02	CP
1,2-DIBROMOMETHANE	ppbv	< 1	1	TO14	28-Oct-02	CP
CHLOROBENZENE	ppbv	< 1	1	TO14	28-Oct-02	CP
1,1,1,2-TETRACHLOROETHANE	ppbv	< 1	1	TO14	28-Oct-02	CP
ETHYL BENZENE	ppbv	< 1	1	TO14	28-Oct-02	CP
M,P-XYLENE	ppbv	< 1	1	TO14	28-Oct-02	CP
O-XYLENE	ppbv	< 1	1	TO14	28-Oct-02	CP
STYRENE	ppbv	< 1	1	TO14	28-Oct-02	CP
BROMOFORM	ppbv	< 1	1	TO14	28-Oct-02	CP
ISOPROPYLBENZENE	ppbv	< 1	1	TO14	28-Oct-02	CP
1,1,2,2-TETRACHLOROETHANE	ppbv	< 1	1	TO14	28-Oct-02	CP
BROMOBENZENE	ppbv	< 1	1	TO14	28-Oct-02	CP
1,2,3-TRICHLOROPROPANE	ppbv	< 1	1	TO14	28-Oct-02	CP

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Client ID: AGAC1-2-10-11-02

Lab ID: L33795-5

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
N-PROPYLBENZENE	ppbv	< 1	1	TO14	28-Oct-02	CP
2-CHLOROTOLUENE	ppbv	< 1	1	TO14	28-Oct-02	CP
1,3,5-TRIMETHYLBENZENE	ppbv	< 1	1	TO14	28-Oct-02	CP
4-CHLOROTOLUENE	ppbv	< 1	1	TO14	28-Oct-02	CP
TERT-BUTYLBENZENE	ppbv	< 1	1	TO14	28-Oct-02	CP
1,3,4-TRIMETHYLBENZENE	ppbv	< 1	1	TO14	28-Oct-02	CP
SEC-BUTYLBENZENE	ppbv	< 1	1	TO14	28-Oct-02	CP
ISOPROPYLBENZENE	ppbv	< 1	1	TO14	28-Oct-02	CP
1,3-DICHLOROBENZENE	ppbv	< 1	1	TO14	28-Oct-02	CP
1,4-DICHLOROBENZENE	ppbv	< 1	1	TO14	28-Oct-02	CP
N-BUTYLBENZENE	ppbv	< 1	1	TO14	28-Oct-02	CP
1,2-DICHLOROBENZENE	ppbv	< 1	1	TO14	28-Oct-02	CP
VINYL CHLORIDE	ppbv	< 2	2	TO14	28-Oct-02	CP

Submitted by
Exygen Research
Reviewed and Approved by:

Charles Simons
Laboratory Supervisor

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Analytical Report

RUETGERS ORGANICS CORPORATION/EHS DEPT.
201 STRUBLE ROAD
STATE COLLEGE, PA 16801
Account Number: 155

Contact: RALPH PEARCE

Date Received: 16-Oct-02
Date Reported: 31-Oct-02

Invoice Number: 30622

Date Collected. 15-Oct-02

Client ID: AGAC1-2-10-11-02

Lab ID: L33795-5

Based upon an NBS Mass Spectral Library Search, the following additional non-target TO14 compounds were identified:

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
VAPOR PHASE VOC						
2-ETHYLTOLUENE	ppbv	< 1	1	TO14	28-Oct-02	CP
2-METHYLHEXANE	ppbv	< 1	1	TO14	28-Oct-02	CP
3-METHYLHEXANE	ppbv	< 1	1	TO14	28-Oct-02	CP
4-METHYL-2-PENTANONE	ppbv	< 1	1	TO14	28-Oct-02	CP
4-METHYL-M-XYLENE	ppbv	< 1	1	TO14	28-Oct-02	CP
ACETONE	ppbv	< 1	1	TO14	28-Oct-02	CP
DIMETHYL NONANE	ppbv	< 1	1	TO14	28-Oct-02	CP
DIMETHYLDECANE	ppbv	< 1	1	TO14	28-Oct-02	CP
DIMETHYLUNDECANE	ppbv	< 1	1	TO14	28-Oct-02	CP
HEXANE	ppbv	< 1	1	TO14	28-Oct-02	CP
TETRAHYDROFURAN	ppbv	< 1	1	TO14	28-Oct-02	CP
TRICHLOROTRIFLUOROETHANE	ppbv	< 1	1	TO14	28-Oct-02	CP
TRIDECANE	ppbv	< 1	1	TO14	28-Oct-02	CP
TRIMETHYLDECANE	ppbv	< 1	1	TO14	28-Oct-02	CP
TRIMETHYLHEXANE	ppbv	< 1	1	TO14	28-Oct-02	CP
TRIMETHYLOCTANE	ppbv	< 1	1	TO14	28-Oct-02	CP
UNDECANE	ppbv	< 1	1	TO14	28-Oct-02	CP

Submitted by
Exygen Research
Reviewed and Approved by:

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RUETGERS ORGANICS CORPORATION/EHS DEPT.
201 STRUBLE ROAD
STATE COLLEGE, PA 16801
Account Number: 155

Contact: RAINER DOMALSKI

Date Received: 16-Oct-02
Date Reported: 31-Oct-02

Invoice Number: 30622

Date Collected: 15-Oct-02

Client ID: AGAF-10-11-02

Lab ID: L33795-6

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
VAPOR PHASE VOC						
DICHLORODIFLUOROMETHANE	ppbv	< 2	2	TO14	28-Oct-02	CP
CHLOROETHANE	ppbv	< 2	2	TO14	28-Oct-02	CP
TRICHLOROFLUOROMETHANE	ppbv	< 2	2	TO14	28-Oct-02	CP
1,1-DICHLOROETHENE	ppbv	< 1	1	TO14	28-Oct-02	CP
DICHLOROMETHANE	ppbv	< 1	1	TO14	28-Oct-02	CP
TRANS-1,2-DICHLOROETHENE	ppbv	< 1	1	TO14	28-Oct-02	CP
1,1-DICHLOROETHANE	ppbv	< 1	1	TO14	28-Oct-02	CP
2,2-DICHLOROPROPANE	ppbv	< 1	1	TO14	28-Oct-02	CP
CIS-1,2-DICHLOROETHENE	ppbv	< 1	1	TO14	28-Oct-02	CP
CHLOROFORM	Ppbv	< 1	1	TO14	28-Oct-02	CP
BROMOCHLOROMETHANE	Ppbv	< 1	1	TO14	28-Oct-02	CP
1,1,1-TRICHLOROETHANE	ppbv	< 1	1	TO14	28-Oct-02	CP
1,1-DICHLOROPROPENE	ppbv	< 1	1	TO14	28-Oct-02	CP
CARBON TETRACHLORIDE	ppbv	< 1	1	TO14	28-Oct-02	CP
BENZENE	ppbv	< 1	1	TO14	28-Oct-02	CP
1,2-DICHLOROETHANE	ppbv	< 1	1	TO14	28-Oct-02	CP
TRICHLOROETHENE	ppbv	< 1	1	TO14	28-Oct-02	CP
1,2-DICHLOROPROPANE	ppbv	< 1	1	TO14	28-Oct-02	CP
BROMODICHLOROMETHANE	ppbv	< 1	1	TO14	28-Oct-02	CP
DIBROMOMETHANE	ppbv	< 1	1	TO14	28-Oct-02	CP
CIS-1,3-DICHLOROPROPENE	ppbv	< 1	1	TO14	28-Oct-02	CP
TOLUENE	ppbv	< 1	1	TO14	28-Oct-02	CP
TRANS-1,3-DICHLOROPROPENE	ppbv	< 1	1	TO14	28-Oct-02	CP
1,1,2-TRICHLOROETHANE	ppbv	< 1	1	TO14	28-Oct-02	CP
TETRACHLOROETHENE	ppbv	< 1	1	TO14	28-Oct-02	CP
1,3-DICHLOROPROPANE	ppbv	< 1	1	TO14	28-Oct-02	CP
DIBROMOCHLOROMETHANE	ppbv	< 1	1	TO14	28-Oct-02	CP
1,2-DIBROMOMETHANE	ppbv	< 1	1	TO14	28-Oct-02	CP
CHLOROBENZENE	ppbv	< 1	1	TO14	28-Oct-02	CP
1,1,1,2-TETRACHLOROETHANE	ppbv	< 1	1	TO14	28-Oct-02	CP
ETHYL BENZENE	ppbv	< 1	1	TO14	28-Oct-02	CP
M,P-XYLENE	ppbv	< 1	1	TO14	28-Oct-02	CP
O-XYLENE	ppbv	< 1	1	TO14	28-Oct-02	CP
STYRENE	ppbv	< 1	1	TO14	28-Oct-02	CP
BROMOFORM	ppbv	< 1	1	TO14	28-Oct-02	CP
ISOPROPYLBENZENE	ppbv	< 1	1	TO14	28-Oct-02	CP
1,1,2,2-TETRACHLOROETHANE	ppbv	< 1	1	TO14	28-Oct-02	CP
BROMOBENZENE	ppbv	< 1	1	TO14	28-Oct-02	CP
1,2,3-TRICHLOROPROPANE	ppbv	< 1	1	TO14	28-Oct-02	CP

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Analytical Report

RUETGERS ORGANICS CORPORATION/EHS DEPT.
201 STRUBLE ROAD
STATE COLLEGE, PA 16801
Account Number: 155

Contact: RALPH PEARCE

Date Received: 16-Oct-02
Date Reported: 31-Oct-02

Invoice Number: 30622

Date Collected: 15-Oct-02

Client ID: AGAF-10-11-02

Lab ID: L33795-6

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
N-PROPYLBENZENE	ppbv	< 1	1	TO14	28-Oct-02	CP
2-CHLOROTOLUENE	ppbv	< 1	1	TO14	28-Oct-02	CP
1,3,5-TRIMETHYLBENZENE	ppbv	< 1	1	TO14	28-Oct-02	CP
4-CHLOROTOLUENE	ppbv	< 1	1	TO14	28-Oct-02	CP
TERT-BUTYLBENZENE	ppbv	< 1	1	TO14	28-Oct-02	CP
1,3,4-TRIMETHYLBENZENE	ppbv	< 1	1	TO14	28-Oct-02	CP
SEC-BUTYLBENZENE	ppbv	< 1	1	TO14	28-Oct-02	CP
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1,4-DICHLOROBENZENE	ppbv	< 1	1	TO14	28-Oct-02	CP
N-BUTYLBENZENE	ppbv	< 1	1	TO14	28-Oct-02	CP
1,2-DICHLOROBENZENE	ppbv	< 1	1	TO14	28-Oct-02	CP
VINYL CHLORIDE	ppbv	< 2	2	TO14	28-Oct-02	CP

Submitted by
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Lab ID: L33795-6

Based upon an NBS Mass Spectral Library Search, the following additional non-target TO14 compounds were identified:

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
VAPOR PHASE VOC						
2-ETHYLTOLUENE	ppbv	< 1	1	TO14	28-Oct-02	CP
2-METHYLHEXANE	ppbv	< 1	1	TO14	28-Oct-02	CP
3-METHYLHEXANE	ppbv	< 1	1	TO14	28-Oct-02	CP
4-METHYL-2-PENTANONE	ppbv	< 1	1	TO14	28-Oct-02	CP
4-METHYL-M-XYLENE	ppbv	< 1	1	TO14	28-Oct-02	CP
ACETONE	ppbv	< 1	1	TO14	28-Oct-02	CP
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TRIMETHYLOCTANE	ppbv	< 1	1	TO14	28-Oct-02	CP
UNDECANE	ppbv	< 1	1	TO14	28-Oct-02	CP

Submitted by
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Reviewed and Approved by:

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Attachment 6

Results of two acute toxicity evaluations of RÜTGERS Organics Corporation, September 17 through September 21, 2002

RESULTS OF TWO ACUTE TOXICITY EVALUATIONS OF RUTGERS ORGANICS CORPORATION, SALEM SITE LAGOON WATER TREATMENT PLANT FINAL EFFLUENT

AAT JOB # 51 - 01 - 55
17 September – 21 September 2002

Report Prepared for:

Rutgers Organics Corporation
201 Struble Road
State College, Pennsylvania 16801

Report Prepared by:

AMERICAN AQUATIC TESTING, INC.
1105 UNION BLVD.
ALLENTOWN, PENNSYLVANIA 18109

INTRODUCTION

A set of two static acute toxicity tests were conducted with larval fathead minnows, *Pimephales promelas* (*P promelas*) and the freshwater cladoceran, *Ceriodaphnia dubia* (*C dubia*) to determine the relative toxicity of final effluent from the Rutgers Organics Corporation Lagoon Water Treatment Plant, Salem, Ohio. The 96-hour static fathead acute toxicity test and the 48-hour static *C dubia* acute toxicity tests were conducted from 17 September through 21 September 2002 The toxicity evaluations were conducted by American Aquatic Testing, Inc., Allentown, Pennsylvania

All tests were performed according to procedures outlined in Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms, 4th Edition (EPA/600/4-90/027F) and Reporting and Testing Guidance for Biomonitoring Required by the Ohio Environmental Protection Agency, October 1991

MATERIALS

TEST ORGANSIMS Fathead Minnow, *Pimephales promelas*

Larval fathead minnows used in acute testing were obtained from in-house cultures maintained by ABS, Inc.. Test age organisms are maintained in shallow depth basins containing 10L of moderately hard reconstituted water and are fed newly hatched *Artemia* (brine shrimp) nauplii twice a day up until test initiation. The test organisms were 1 days old at test initiation. No acclimation of these test organisms was required as they were raised in moderately hard reconstituted water, which was used for testing.

Freshwater Cladoceran, *Ceriodaphnia dubia*

Cladoceran neonates, *C. dubia* were obtained from AAT, Inc.'s in-house cultures. Cultures for generating test age (<24 hours old) neonates are maintained as single cultures in 30 mL soufflé cups containing 15 mL of moderately hard reconstituted water. These adults are transferred daily into fresh culture water and are fed a combination of a unicellular green alga (*Selenastrum capricornutum*) and a yeast/Cerophyll/trout chow (YCT) suspension. Broods released during a five hour period were pooled and used to initiate the acute toxicity test. No acclimation of these test organisms was required as they were raised in moderately hard reconstituted water, which was used for testing. Neonates were released between 0800 and 1300 of September 17, 2002.

DILUTION WATER

Moderately hard reconstituted water was prepared in accordance to procedures outlined in EPA/600/4-90/027F and was used as dilution/control water for the toxicity tests. Deionized water (Specialty Filtration Products) and reagent grade chemicals were used to achieve the following concentrations: 96 mg/L of $NaHCO_3$, 60.0 mg/L of $MgSO_4$ and 4.0 mg/L of KCl and 60.0mg/L of $CaSO_4$ $2H_2O$.

TEST MATERIAL

The material tested was final effluent collected by Howells and Baird personnel with a grab sampler placed at the outfall. One grab sample was collected for each of the two acute toxicity tests. The sample, collected September 16, 2002, was shipped overnight to AAT, Inc. in a cooler containing ice and was used to initiate testing on September 17, 2002. A Chain-of-Custody accompanied the sample. Tests were initiated prior to the expiration of the 36-hour holding time.

METHODS

P. promelas larvae (1 day old) were exposed to the effluent sample for 96 hours under static, non-renewal conditions Test organisms were exposed in groups of 10 in 1 L glass beakers containing 500 mL of test solution with two replicates per concentration (20 organisms per concentration). The test organisms were fed prior to test initiation and at 48 hours.

C. dubia neonates (<24 hours old) were exposed to the effluent sample for 48 hours under static non-renewal conditions. Test organisms were exposed in groups of five in 30 mL soufflé cups containing 15 mL of test solution with four replicates per concentration (20 organisms per concentration) The test organisms were not fed during the test exposure.

Both sets of test chambers were placed in randomized positions in a temperature controlled environment maintained at 25 $\pm$ 1 $^{\circ}$ C. The highest concentration used for exposure was 100 %. A 0.56 dilution schedule was used to prepare sample concentrations of 56%, 32%, 18% and 10%, by volume. A control sample consisting of 100 % dilution water was also tested.

Surviving test organisms were counted daily. Dead test organisms and debris were removed daily at this time. Temperature was measured daily in a surrogate replicate placed alongside the test chambers Dissolved oxygen, pH and conductivity were measured in one replicate chamber at each concentration at the beginning and end of the test exposure. Alkalinity and hardness were measured in the control and the 100% concentration at the beginning of the test exposure. The lighting regime was 16 hours light, 08 hours dark.

RESULTS

FATHEAD MINNOW 96-HOUR ACUTE TEST RESULTS

As a result of less than 50 % mortality in any test concentration during the exposure period the acute data was evaluated visually. Therefore, the 96-hour LC_{50} is > 100%. This result yields an Acute Toxic Unit; TUa ($100\%/LC_{50}$) of 1.0.

CERIODAPHNIA DUBIA 48-HOUR ACUTE TEST RESULTS

As a result of less than 50 % mortality in any test concentration during the exposure period the acute data was evaluated visually. Therefore, the 48-hour LC_{50} is > 100%. This result yields an Acute Toxic Unit; TUa ($100\%/LC_{50}$) of 1.0.

Table I. Fathead Minnow Mortality Data

CLIENT: Rutgers Organics Corp., Salem Lagoon Water Treatment Plant
TEST: 96-hour Definitive Acute Toxicity Test
DATE: 17 –21 September 2002

Sample Type	% Effluent	# of Organisms	Cumulative number of organisms affected at 24 hr	48 hr	72 hr	96 hr	% Mortality*
Final Effluent	0	20	0	0	0	1	5
	10	20	0	0	0	0	0
	18	20	0	0	0	0	0
	32	20	1	1	1	1	5
	56	20	0	0	1	1	5
	100	20	0	0	0	0	0

* Cumulative Percent Mortality at 96 hours

Table II. Fathead Minnow Physical/Chemical Measurements

CLIENT: Rutgers Organics Corp., Salem Lagoon Water Treatment Plant
TEST: 96-hour Definitive Acute Toxicity Test
DATE: 17 –21 September 2002

	% Effluent by Volume					
Time	0	10	18	32	56	100
0 hour						
Conduct. μmhos	290	385	475	700	950	1350
D.O. ppm	7.6	7.5	7.3	7.0	6.6	6.4
Temp. °C A	25.0	25.0	25.0	25.0	25.0	25.0
B	25.0	25.0	25.0	25.0	25.0	25.0
pH Std .units	7.6	7.5	7.5	7.4	7.4	7.4
Alkalinity mg/L	70					220
Hardness mg/L	90					540
24 hours A	25.0	25.0	25.0	25.0	25.0	25.0
Temp. °C B	25.0	25.0	25.0	25.0	25.0	25.0
48 hours A	25.5	25.5	25.5	25.5	25.5	25.5
Temp. °C B	25.5	25.5	25.5	25.5	25.5	25.5
72 hours A	25.0	25.0	25.5	25.5	25.5	25.5
Temp. °C B	25.0	25.0	25.5	25.5	25.5	25.5
96 hours						
Conduct. μmhos	320	410	550	700	1000	1350
D.O. ppm	6.8	6.8	6.9	6.9	7.0	7.0
pH Std .units	7.5	7.5	7.6	7.7	7.8	7.8
Temp. °C A	25.5	25.5	25.5	25.5	25.5	25.0
B	25.5	25.5	25.5	25.5	25.5	25.0

Table I. *Ceriodaphnia dubia* Mortality Data

CLIENT: Rutgers Organics Corp., Salem Lagoon Water Treatment Plant
TEST: 48 hour Definitive Acute Toxicity Test
DATE: 17 –19 September 2002

Sample Type	% Effluent	# of Organisms	Cumulative number of organism affected at 24 hours	48 hours	% Mortality*
Final Effluent	0	20	0	0	0
	10	20	0	0	0
	18	20	0	0	0
	32	20	0	0	0
	56	20	0	0	0
	100	20	0	0	0

* Cumulative Percent Mortality at 48 hours

Table II. *Ceriodaphnia dubia* Physical/Chemical Measurements

CLIENT: Rutgers Organics Corp., Salem Lagoon Water Treatment Plant
TEST: 48 hour Definitive Acute Toxicity Test
DATE: 17 –19 September 2002

	% Effluent by Volume					
Time	0	10	18	32	56	100
0 hour						
Conduct. µmhos	290	385	475	700	950	1350
D.O. ppm	7.6	7.5	7.3	7.0	6.6	6.4
Temp. °C	25.0	25.0	25.0	25.0	25.0	25.0
pH Std .units	7.6	7.5	7 5	7.4	7.4	7.4
Alkalinity mg/L	70					220
Hardness mg/L	90					540
24 hours						
Temp. °C	25.0	25.0	25.0	25.0	25.0	25.0
48 hours						
Conduct. µmhos	300	395	500	700	950	1350
D.O. ppm	7.2	7.3	7.3	7.3	7.2	7.2
pH Std .units	7.5	7.5	7.5	7.6	7.7	7.8
Temp. °C	25.0	25.0	25.0	25.5	25.5	25.5

APPENDIX I

RAW DATA

17 September – 21 September, 2002

RESULTS OF TWO ACUTE TOXICITY EVALUATIONS OF
RUTGERS ORGANICS CORPORATION,
SALEM SITE LAGOON WATER TREATMENT PLANT
FINAL EFFLUENT

Freshwater Acute Test

American Aquatic Testing, Inc.

Job #: 51-01-55

Species: P. promelas

Dilution Water: EPA mod hard

Start Date/Time: 9-17-02 1600

End Date/Time: 9-21-02 1515

Test Type: 96hr SDR

Concentration	Rep.	Live Count					Temperature (C)				
		0 hr.	24 hr.	48 hr.	72 hr.	96 hr.	0 hr.	24 hr.	48 hr.	72 hr.	96 hr.
Control	A	10	10	10	10	9	25.0	25.0	25.5	25.0	25.5
	B	10	10	10	10	10	25.0	25.0	25.5	25.0	25.5
10%	A	10	10	10	10	10	25.0	25.0	25.5	25.0	25.5
	B	10	10	10	10	10	25.0	25.0	25.5	25.0	25.5
18%	A	10	10	10	10	10	25.0	25.0	25.5	25.5	25.5
	B	10	10	10	10	10	25.0	25.0	25.5	25.5	25.5
32%	A	10	9	9	9	9	25.0	25.0	25.5	25.5	25.5
	B	10	10	10	10	10	25.0	25.0	25.5	25.5	25.5
56%	A	10	10	10	10	10	25.0	25.0	25.5	25.5	25.5
	B	10	10	10	9	9	25.0	25.0	25.5	25.5	25.5
100%	A	10	10	10	10	10	25.0	25.0	25.5	25.5	25.0
	B	10	10	10	10	10	25.0	25.0	25.5	25.5	25.0
Initials		DW	MP	DW	MP	MP	TAP	MP	DW	MP	MP
Date		9/17	9/18	9/19	9/20	9/21	9/17	9/18	9/19	9/20	9/21

Concentration	pH		D.O. (mg/L)		Cond. (umhos)	
	0 hr.	96 hr.	0 hr.	96 hr.	0 hr.	96 hr.
Control	7.6	7.5	7.6	6.8	290	320
10%	7.5	7.5	7.5	6.8	385	410
18%	7.5	7.6	7.3	6.9	475	550
32%	7.4	7.7	7.0	6.9	700	700
56%	7.4	7.8	6.6	7.0	950	1000
100%	7.4	7.8	6.4	7.0	1358	1350
Initials	TAP	MP	TAP	MP	TAP	MP
Date	9/17	9/21	9/17	9/21	9/17	9/21

Concentration	Alkalinity (mg/L)	Hardness (mg/L)
Control	70	90
100%	220	540
Initials	TAP	TAP
Date	9/17	9/17

Observations:

Freshwater Acute Test

American Aquatic Testing, Inc.

Job #: 51-01-55 Start Date/Time: 9-17-02 1410

Species: C. Dubia End Date/Time: 9-19-02 1515

Dilution Water: EPA reconstituted hard Test Type: 48hr SNR

Conc. %	Temperature (C) 0 hr.	24 hr.	48 hr.
Control	25.0	25.0	25.0
10	25.0	25.0	25.0
18	25.0	25.0	25.0
32	25.0	25.0	25.5
56	25.0	25.0	25.5
100	25.0	25.0	25.5

Conc. %	pH (Stand units) 0 hr.	48 hr.
Control	7.6	7.5
10	7.5	7.5
18	7.5	7.5
32	7.4	7.6
56	7.4	7.7
100	7.4	7.8

Conc.	Dissolved Oxygen (mg/L)	
Control	7.6	7.2
10	7.5	7.3
18	7.3	7.3
32	7.0	7.3
56	6.6	7.2
100	6.4	7.2

Conc.	Conductivity (umhos)		
Control	290		300
10	385		395
18	475		500
32	700		700
56	950		950
100	1350		1350
Initials	TMP	MP	MP
Date	9/17	9/18	9/19

Conc.	Alkalinity	Hardness
Control	70	90
100%	220	540
Initials	TMP	TMP
Date	9/17	9/17

Conc. %	Rep.	Live Count 0 hr.	24 hr.	48 hr.
Control	A	5	5	5
	B	5	5	5
	C	5	5	5
	D	5	5	5
10	A	5	5	5
	B	5	5	5
	C	5	5	5
	D	5	5	5
18	A	5	5	5
	B	5	5	5
	C	5	5	5
	D	5	5	5
32	A	5	5	5
	B	5	5	5
	C	5	5	5
	D	5	5	5
56	A	5	5	5
	B	5	5	5
	C	5	5	5
	D	5	5	5
100	A	5	5	5
	B	5	5	5
	C	5	5	5
	D	5	5	5
Initials		MP	MP	MP
Date		9/17	9/18	9/19

Observations:

AMERICAN AQUATIC TESTING, INC.

CHAIN OF CUSTODY

1105 UNION BLVD.
ALLENTOWN, PA 18109
610 434 9015

Job #: 51-01-55

Client: Howells & Baird/Rutgers Client Contact: Harry Bircher

Address: _____

Phone #: _____

Sample Disposal: **Return to client** [ ] **Lab disposal** [X]

	Initial Chemistry @ Laboratory						SAMPLE INFORMATION					Toxicity Testing Requested			
Sample #	Temp °C	Dis. O_2	pH	Alk. mg/L	Hard. mg/L	Cl- mg/L	Sample Identification	Sample Type	Sample Volume	Sample Date	Sample Time	Acute	Chronic	Sediment	Other
01							Outfall-9-16-02	Grab	1gal	9-16-02	1300	X			

Samples were:

1. Collected by AAT personnel [ ] Client personnel [X]
2. Transported on ice? Yes [X] No [ ]
3. Received with in holding time? Yes [X] No [ ]
4. Sample matrix is: Liquid [X] Sediment [ ] Soil [ ] Other [ ]

CUSTODY INFORMATION

Sample #	Relinquished by:	Received by:	Date	Time	Relinquished by:	Received for Lab:	Date	Time	Lab Use ISTN#
01	HCD	Fedex	9-16-02	1700	Fed ex		9/17/02	1015	02584

Special Instructions:

APPENDIX II

OHIO EPA NPDES BIOMONITORING REPORT FORM

OHIO EPA NPDES BIOMONITORING REPORT FORM

GENERAL INFORMATION

1. Facility Name: Rutgers Organics Corporation
   Reporting Date: 02 October 2002

2. Address: 1224 Benton Road
   Salem, Ohio 44460

3. Ohio EPA Permit Number: Substantive Discharge Criteria 4. Application (NPDES) No.
5. Facility Contact: Ralph Pearce 6. Phone No.: (800) 458-3434
7. Consultant/Testing Lab Name: American Aquatic Testing, Inc.

8. Consultant/Lab Contact: Chris Nally 9. Phone No.: (610) 434-9015
10. Receiving Water(s) of Discharge: Unnamed Tributary of the Middle Fork of Middle Creek.

11. Outfall(s) Tested: 09/16/02 001

    Average Daily Flows:
    on Day Sampled (gal/day)

12. Is your current Standard Operating Procedure (SOP) Manual on file with Ohio EPA? (Yes/No) No If yes, date submitted: _____. If no, an SOP that follows Ohio EPA and/or U.S. EPA protocols must be submitted as soon as possible in order to eliminate the need to include this information with every report.

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature

Christopher J. Nally, President

10/22/02
Date

ACUTE TOXICITY TEST SAMPLING DATA

TABLE

Sampling Summary for Acute Toxicity Tests

Sampling Location & Description	Sample Collection Beginning MM/DD/Time	Sample Collection Ending MM/DD/Time	Weather/Receiving Stream Conditions
Final Effluent:	09/16,/02 1300	N/A	
Outfall No.: 001			
Type (Grab/Composite): Grab			
Volume Collected: 1.0-gallon			
Upstream Station:	N/A		
Waterbody:			
Station No.:			
Type (Grab/Composite):			
Volume Collected:			
Downstream Station (Near-field):	N/A		
Waterbody:			
Station No.:			
Type (Grab/Composite):			
Volume Collected:			
Additional Stations (If needed):	N/A		
Waterbody:			
Station No.:			
Type (Grab/Composite):			
Volume Collected:			
Waterbody:			
Station No.:			
Type (Grab/Composite):			
Volume Collected:			

TOXICITY TEST CONDITIONS

TABLE

Summary of Toxicity Test Conditions	
1. Test Species and Age:	*Pimephales promelas* - 1 days old
2. Test Type and Duration:	96-hour Static Acute
3. Test Dates:	17 September - 21 September 2002
4. Test Temperature (°C):	25.0°C ± 1.0°C
5. Light Quality:	50-100 ft. candles
6. Photoperiod:	16 hours light / 8 hours dark
7. Feeding Regime:	None
8. Size of Test Vessel:	1000 mL
9. Volume and Depth of Test Solutions:	500 mL / 92 mm
10. No. of Test Organisms per Test Vessel:	Ten
11. No. of Test Vessels per Test Solution:	Two
°12. Total No. of Test Organisms per Test Solution:	20
13. Test Concentrations (as percent by volume effluent):	0, 10, 18, 32, 56, and 100%
14. Renewal of Test Solutions:	None
15. Dilution and Primary Control Water:	Moderately Hard Reconstituted Water
16. Secondary Control Water:	N/A
17. Aeration? Before/During Test:	None
18. Endpoints Measured:	LC_{50} and TU_a
19. If secondary control water used as diluent due to toxicity in primary control water, indicate number of consecutive tests conducted with alternative diluent:	N/A

ACUTE TOXICITY TEST RESULTS

TABLE

Results of a *Pimephales* (genus) *promelas* (species) 96-Hour Static Acute Toxicity Test
Conducted 09/17/02 (mm/dd/yy) - 08/21/02 (mm/dd/yy) Using Effluent from Outfall 001 (number).

Test Solutions	Cumulative Percent Mortality (Cumulative Percent Affected)[a]				LC_{50} Values (EC_{50} Values)			
	24-Hr	48-Hr	72-Hr	96-Hr	24-Hr	48-Hr	72-Hr	96-Hr
Primary Control/ Dilution Water	0	0	0	1	>100%	>100%	>100%	>100%
	(0)	(0)	(0)	(5)	(N/A)	(N/A)	(N/A)	(N/A)
Secondary Control	N/A				LC_{50} 95% Confidence Limits (EC_{50} 95% Confidence Limits)			
	( )	( )	( )	( )	24-Hr	48-Hr	72-Hr	96-Hr
10 % Effluent	0	0	0	0				
	(0)	(0)	(0)	(0)				
18 % Effluent	0	0	0	0	LL N/A	N/A	N/A	N/A
	(0)	(0)	(0)	(0)	UL N/A	N/A	N/A	N/A
32 % Effluent	1	1	1	1	LL (N/A)	( )	( )	( )
	(5)	(5)	(5)	(5)	UL (N/A)	( )	( )	( )
56 % Effluent	0	0	1	1 .	LL = Lower Limit UL = Upper Limit			
	(0)	(0)	(5)	(5)				
100 % Effluent	0	0	0	0	Calculated TU_a Value: 1.0			
	(0)	(0)	(0)	(0)				
Near-Field Sample	N/A				Method(s) Used to Determine LC_{50}, EC_{50}, and Confidence Limit Values: Visual Inspection			
	( )	( )	( )	( )				

[a]-cumulative percent affected is the total percentage of test organisms observed dead, immotile, exhibiting loss of equilibrium, or other defined endpoints (specify below): _____.

TOXICITY TEST CONDITIONS

TABLE

Summary of Toxicity Test Conditions	
1. Test Species and Age:	*Ceriodaphnia dubia* - <24-hours old
2. Test Type and Duration:	48-hour Static Acute
3. Test Dates:	17 - 19 September 2002
4. Test Temperature (°C):	25.0°C ± 1°C
5. Light Quality:	50-100 ft candles
6. Photoperiod:	16 hours light / 8 hours dark
7. Feeding Regime:	None
8. Size of Test Vessel:	30 mL
9. Volume and Depth of Test Solutions:	25 mL / 25 mm
10. No. of Test Organisms per Test Vessel:	Five
11. No. of Test Vessels per Test Solution:	Four
12. Total No. of Test Organisms per Test Solution:	20
13. Test Concentrations (as percent by volume effluent):	0, 10, 18, 32, 56, and 100%
14. Renewal of Test Solutions:	None
15. Dilution and Primary Control Water:	Moderately Hard Reconstituted Water
16. Secondary Control Water:	N/A
17. Aeration? Before/During Test:	None
18. Endpoints Measured:	LC_{50} and TU_a
19. If secondary control water used as diluent due to toxicity in primary control water, indicate number of consecutive tests conducted with alternative diluent:	N/A

ACUTE TOXICITY TEST RESULTS

TABLE

Results of a *Ceriodaphnia* (genus) *dubia* (species) 48 -Hour Static Acute Toxicity Test
Conducted 08/20/02 (mm/dd/yy) - 08/22/02 (mm/dd/yy) Using Effluent from Outfall 001 (number).

Test Solutions	Cumulative Percent Mortality (Cumulative Percent Affected)[a]				LC_{50} Values (EC_{50} Values)			
	24-Hr	48-Hr	72-Hr	96-Hr	24-Hr	48-Hr	72-Hr	96-Hr
Primary Control/ Dilution Water	0	0			>100%	>100%		
	(0)	(0)	( )	( )	(N/A)	(N/A)	( )	( )
Secondary Control	N/A				LC_{50} 95% Confidence Limits (EC_{50} 95% Confidence Limits)			
	( )	( )	( )	( )	24-Hr	48-Hr	72-Hr	96-Hr
10 % Effluent	0	0						
	(0)	(0)	( )	( )	LL N/A	N/A		
18 % Effluent	0	0			UL N/A	N/A		
	(0)	(0)	( )	( )				
32 % Effluent	0	0			LL (N/A)	(N/A)	( )	( )
	(0)	(0)	( )	( )	UL (N/A)	(N/A)	( )	( )
56 % Effluent	0	0			LL = Lower Limit UL = Upper Limit			
	(0)	(0)	( )	( )				
100 % Effluent	0	0			Calculated TU_a Value: 1.0			
	(0)	(0)	( )	( )				
Near-Field Sample	N/A				Method(s) Used to Determine LC_{50}, EC_{50}, and Confidence Limit Values: Visual Inspection			
	( )	( )	( )	( )				

[a]-cumulative percent affected is the total percentage of test organisms observed dead, immotile, exhibiting loss of equilibrium, or other defined endpoints (specify below): _____.